



Environmental Compliance Survey Report

Prepared for

*The Federal Bureau of Prisons
FCI Loretto*

Jay Collert, CHMM, CET
Aarcher Inc.
910 Commerce Road
Annapolis, MD 21401
281-256-9044

Table of Contents

I	EXECUTIVE SUMMARY	2
II	SURVEY FINDINGS – FCI LORETTO	5
A.	<i>Air Emissions</i>	5
B.	<i>Water Quality</i>	5
C.	<i>Waste Water Quality</i>	5
D.	<i>Hazardous Waste Management</i>	5
E.	<i>Universal Waste/Used Oil Management</i>	7
F.	<i>Tank Management/SPCC</i>	9
G.	<i>Oils and Hazardous Substances Spills and Reporting</i>	10
H.	<i>Medical/Biohazard Wastes</i>	10
I.	<i>Environmental Training</i>	10
J.	<i>Miscellaneous Findings</i>	10
III	FEDERAL RULES	11
IV	PENNSYLVANIA-SPECIFIC RULES	66

Environmental Compliance Survey of Federal Bureau of Prisons

FCI Loretto

Performed By Archer Inc.

I Executive Summary

- A. An environmental compliance survey was conducted by Archer Inc. for the Federal Bureau of Prisons; FCI Loretto, Cambria County, Pennsylvania. Jay Collert performed the survey for Archer Inc. Representatives from the Bureau of Prisons were Robert Scinta, Frank Hribar and Joe Coho.
- B. The survey was conducted at FCI Loretto, in Loretto, Pennsylvania. The facility is located in Cambria County in southwest Pennsylvania between Altoona and Johnstown, 90 miles east of Pittsburgh. The facility is located off Route 22, between Interstate 80 and the Pennsylvania Turnpike via Route 220.
- C. The Federal Correctional Institution in Loretto is a low security facility housing male inmates. An adjacent satellite prison camp houses minimum security male offenders.
- D. According to the pre-survey information data sheet submitted prior to the survey, and the BOP website, FCI Loretto has an inmate and staff population of approximately 1,644.
- E. The survey was performed using state and federal-specific protocols dated December 2006. Survey findings are categorized into the following areas:
 - a. Priority 1: Areas with actual or potential immediate harm to human health or the environment, potential for significant liability, or other potential to inhibit the institution from meeting its mission or the mission of the Federal Bureau of Prisons.
 - b. Priority 2: Regulatory findings that are not Priority 1. These include Federal and state laws, regulations, and applicable Executive Orders.
 - c. Priority 3: Non-regulatory findings that are not Priority 1 or Priority 2.
- F. FCI Loretto is located in Pennsylvania and applicable protocols for that state were used. Items that have no state equivalence or when the state incorporates by reference the Federal requirement, the Federal citation is indicated and used. The compliance areas surveyed and a summary of findings in each of the different levels are as follows:

1. Air Emissions
 - a- Priority 1: - 0
 - b- Priority 2: - 1
 - c- Priority 3: - 0
2. Water Quality
 - a- Priority 1: - 0
 - b- Priority 2: - 0
 - c- Priority 3: - 0
3. Waste water Quality
 - a- Priority 1: - 0
 - b- Priority 2: - 0
 - c- Priority 3: - 0
4. Hazardous Waste Management
 - a- Priority 1: - 0
 - b- Priority 2: - 3
 - c- Priority 3: - 0
5. Universal Waste/Used Oil Management
 - a- Priority 1: - 0
 - b- Priority 2: - 5
 - c- Priority 3: - 0
6. Tank Management/SPCC
 - a- Priority 1: - 0
 - b- Priority 2: - 1
 - c- Priority 3: - 0

7. Oils/Hazardous Substances Spills and Reporting

a- Priority 1: - 0

b- Priority 2: - 0

c- Priority 3: - 0

8. Medical/Bio Wastes

a- Priority 1: - 0

b- Priority 2: - 0

c- Priority 3: - 0

9. Environmental Training

a- Priority 1: - 0

b- Priority 2: - 1

c- Priority 3: - 0

10. Miscellaneous Requirements

a- Priority 1: - 0

b- Priority 2: - 0

c- Priority 3: - 0

II Survey Findings – FCI Loretto

A. Air Emissions

1. **Audit Finding:** PRI 2 – AE – 001: Recycling and Recovery Equipment Certification
 - a- **Activity/Operation:** The institution utilizes staff personnel who repair and recycle equipment that contains refrigerants.
 - b- **Requirement:** IAW 40 CFR 82.150(b) and 40 CFR 82.158, refrigerant recycling and recovery equipment is required to be certified by an approved equipment testing organization.
 - c- **Finding:** In the HVAC shop, the recycling and recovery equipment had a sticker that said it complied with the ARI 410 Standard. The standard that is recognized to fulfill the requirements of Appendix B1 in 40 CFR 82 is the ARI 740-98 Standard. The ARI 410 Standard does not certify recycling and recovery equipment as required by the regulations.
 - d- **Recommendation:** Contract with an organization that can test all institution refrigerant recycling and recovery equipment to the ARI 740-98 Standard and affix the certification sticker to the equipment. Ensure all new equipment coming into the institution is certified prior to use.

B. Water Quality

1. **No Findings**

C. Waste Water Quality

1. **No Findings**

D. Hazardous Waste Management

1. **Audit Finding:** PRI 2 – HW – 001: Silver Reclamation
 - a- **Activity/Operation:** The institution reclaims silver from a film developer process.
 - b- **Requirement:** IAW 40 CFR 266.70, generators who recover economically significant amounts of silver must document that the materials are not being accumulated speculatively. This is done by documenting the volume of the silver stored at the beginning of the calendar year, amount of silver generated or received during the calendar year, and the amount of silver remaining at the end of the calendar year. The amount of silver recycled or transferred must equal at least 75% by

weight or volume of the amount of sliver accumulated at the beginning of the period. If not, then speculative accumulation is being accomplished which is prohibited without additional storage requirements.

- c- **Finding:** Records could not be located during the site visit.
- d- **Recommendation:** Begin the practice of keeping the required documentation to prove the silver being reclaimed is not being accumulated speculatively. If the 75% by weight or volume threshold is being reached within a year, transfer the silver more frequently.

2. **Audit Finding:** PRI 2 – HW – 002: Hazardous Waste Management

- a- **Activity/Operation:** The institute generates hazardous waste as defined by 25 PA Code 261a, which incorporates by reference 40 CFR 261.
- b- **Requirement:** IAW 25 PA Code 262a, which incorporates by reference 40 CFR 262, hazardous waste, must be accumulated in containers marked with the words “hazardous waste” or have a hazardous waste label.
- c- **Finding:** In the water plant laboratory, spent COD bottles containing hazardous waste, was being accumulated in a cabinet. The bottles were not marked hazardous waste. No procedure could be produced that illustrated how the storage and final disposition of the hazardous waste from the accumulation area took place.
- d- **Recommendation:** Develop a procedure for handling, managing and accumulating hazardous waste at the institution. Place all COD bottles containing hazardous waste into a compatible container and mark the container “hazardous waste”. Manage the wastes according to the procedures developed, tracking the wastes as it moves from the institution to a disposal company.

3. **Audit Finding:** PRI 2 – HW – 003: Hazardous Waste Management

- a- **Activity/Operation:** The institute generates hazardous waste as defined by 25 PA Code 261a, which incorporates by reference 40 CFR 261.
- b- **Requirement:** IAW 25 PA Code 262a, which incorporates by reference 40 CFR 262, hazardous waste, must be accumulated in containers marked with the words “hazardous waste” or have a hazardous waste label.
- c- **Finding:** In the construction shop, a 5-gallon gasoline safety can labeled “hazardous waste” was found. The label had not been filled out. The date, type of hazardous waste, and other information found on a hazardous waste label was missing. Facility personnel thought the waste was paint waste, but was not sure.

- d- **Recommendation:** Develop a procedure for handling, managing and accumulating hazardous waste at the institution. When placing hazardous waste labels on waste, ensure the labels are filled out appropriately and the contents of the waste is known to facility personnel managing the waste. Manage the waste according to the procedures developed, tracking the waste as it moves from the institution to a disposal company.

E. Universal Waste/Used Oil Management

1. **Audit Finding:** PRI 2 – UW – 001: Waste Oil Labels.

- a- **Activity/Operation:** The facility generates waste oil as defined by 25 PA § 298.10(a).
- b- **Requirement:** IAW 25 PA § 298.22(c)(1-4), labels with the words “waste oil” will be placed on all containers/tanks/pipes holding waste oil. (Federal requirements specify a “used oil” label be on all containers. Pennsylvania requirements specify a “waste oil” label be placed on all containers. Institution personnel were unaware of the state requirement, which became effective in 2003)
- c- **Finding:** In the UNICOR chemical storage area, containers holding waste oil were not labeled.
- d- **Recommendation:** Procure waste oil labels and ensure all containers/tanks/pipes holding waste oil that is to be recycled are labeled. Also ensure that all containers/tanks/pipes that hold waste oil are closed except when adding and removing the waste oil, the containers/tanks/pipes are compatible with the waste oil, and the containers are not leaking and are in good condition.

2. **Audit Finding:** PRI 2 – UW – 002: Waste Oil Labels.

- a- **Activity/Operation:** The facility generates waste oil as defined by 25 PA § 298.10(a).
- b- **Requirement:** IAW 25 PA § 298.22(c)(1-4), labels with the words “waste oil” will be placed on all containers/tanks/pipes holding waste oil. (Federal requirements specify a “used oil” label be on all containers. Pennsylvania requirements specify a “waste oil” label be placed on all containers. Institution personnel were unaware of the state requirement, which became effective in 2003)
- c- **Finding:** In the garage area, the 300 gallon waste oil tank was not labeled.
- d- **Recommendation:** Procure waste oil labels and ensure all containers/tanks/pipes holding waste oil that is to be recycled are labeled. Also ensure that all containers/tanks/pipes that hold waste oil are closed

except when adding and removing the waste oil, the containers/tanks/pipes are compatible with the waste oil, and the containers are not leaking and are in good condition.

3. **Audit Finding:** PRI 2 – UW – 003: Universal Waste Storage.

- a- **Activity/Operation:** The facility generates universal wastes lamps as defined by 25 PA Code 266b which incorporates by reference 40 CFR 273.
- b- **Requirement:** IAW 25 PA Code 266b, which incorporates by reference 40 CFR 273.13(d) and 40 CFR 273.14, universal wastes lamps must be managed according to specific parameters. The containers must be closed except when adding or removing the universal wastes. The containers must be marked WASTE LAMP(S), USED LAMP(S), or UNIVERSAL WASTE – LAMP(S). The package must be designed so as to prevent breakage during normal handling conditions. The container must be dated or evidence provided that indicates the universal waste has not been stored onsite longer than 1 year.
- c- **Finding:** At the pole barn, universal waste lamps were found stored in open boxes, undated and not labeled. Universal waste lamps were also found in open-top 35-gallon trash cans not labeled, not closed, and not dated.
- d- **Recommendation:** Develop procedures which address the specific requirements for accumulating and storing of universal waste lamps onsite. Train all institution personnel responsible for handling universal waste addressing the procedures developed.

4. **Audit Finding:** PRI 2 – UW – 004: Universal Waste Storage.

- a- **Activity/Operation:** The facility generates universal wastes lamps as defined by 25 PA Code 266b which incorporates by reference 40 CFR 273.
- b- **Requirement:** IAW 25 PA Code 266b, which incorporates by reference 40 CFR 273.13(d) and 40 CFR 273.14, universal wastes lamps must be managed according to specific parameters. The containers must be closed except when adding or removing the universal wastes. The containers must be marked WASTE LAMP(S), USED LAMP(S), or UNIVERSAL WASTE – LAMP(S). The package must be designed so as to prevent breakage during normal handling conditions. The container must be dated or evidence provided that indicates the universal waste has not been stored onsite longer than 1 year.
- c- **Finding:** At the electric shop, universal waste lamps were found stored in open boxes, undated and not labeled.

- d- **Recommendation:** Develop procedures which address the specific requirements for accumulating and storing of universal waste onsite. Train all institution personnel responsible for handling universal waste addressing the procedures developed.

5. **Audit Finding:** PRI 2 – UW – 005: Universal Waste Storage.

- a- **Activity/Operation:** The facility generates universal wastes batteries as defined by 25 PA Code 266b which incorporates by reference 40 CFR 273.
- b- **Requirement:** IAW 25 PA Code 266b, which incorporates by reference 40 CFR 273.12 and 40 CFR 273.14, universal wastes batteries must be managed according to specific parameters. The containers must be closed except when adding or removing the universal wastes. The containers must be marked WASTE BATTERY (IES), USED BATTERY (IES), or UNIVERSAL WASTE – BATTERY (IES). The package must be designed so as to prevent breakage during normal handling conditions. The container must be dated or evidence provided that indicates the universal waste has not been stored onsite longer than 1 year.
- c- **Finding:** At the pole barn, universal waste batteries were found stored in open boxes, undated and not labeled.
- d- **Recommendation:** Develop procedures which address the specific requirements for accumulating and storing of universal waste batteries onsite. Train all institution personnel responsible for handling universal waste addressing the procedures developed.

F. Tank Management/SPCC

1. **Audit Finding:** PRI 2 – TM – 001: Inaccurate ICP/SPCC

- a- **Activity/Operation:** The institution stores in above ground containers/tanks over 1,320 gallons of oil/petroleum.
- b- **Requirement:** IAW 40 CFR 112.7, facilities that have more than 1,320 gallons of oil/petroleum in above ground storage tanks must prepare and maintain a Spill Prevention, Controls and Countermeasures Plan (SPCC). The SPCC Plan, at the discretion of the facility, may be combined into an Integrated Contingency Plan as long as all of the SPCC elements are contained in the plan and a cross reference is included if the plan does not follow the order listed in 40 CFR 112.7.
- c- **Finding:** After reviewing the ICP/SPCC Plan, none of the required elements for the SPCC plan could be found.

- d- **Recommendation:** An SPCC plan should be developed following all of the elements from 40 CFR 112. Once developed, comply with all requirements listed in the SPCC/ICP plan.

G. Oils and Hazardous Substances Spills and Reporting

1. **No findings found in this area.**

H. Medical/Biohazard Wastes

1. **No findings found in this area.**

I. Environmental Training

1. **Audit Finding:** PRI 2-TNG-001: SPCC Training

- a- **Activity/Operation:** The institution stores in above ground containers/tanks over 1,320 gallons of oil/petroleum.
- b- **Requirement:** IAW 40 CFR 112.7(f)(3), all oil handling employees must be trained at least once a year to ensure adequate understanding of the SPCC plan.
- c- **Finding:** No record of this training could be located at the institution.
- d- **Recommendation:** Start training all oil handling employees at least once a year and documents the training and the personnel who attended.

J. Miscellaneous Findings

1. **No Findings in this area.**

III Federal Rules

The following citations were used to support the findings based on federal regulations. The citations are listed in numeric order.

IV Pennsylvania-Specific Rules

The following citations were used to support the findings based on Pennsylvania-specific regulations. The citations are listed in numeric order.

III Federal Rules

The following citations were used to support the findings based on federal regulations. The citations are listed in numeric order.

Environmental Protection Agency**Pt. 82, Subpt. F, App. B1**

Office of the Federal Register, National Archives and Records Administration, 1992, 800 North Capitol Street, NW., Washington, D.C. 20402; U.S.A.

[69 FR 11981, Mar. 12, 2004]

APPENDIX A1 TO SUBPART F OF PART 82—GENERIC MAXIMUM CONTAMINANT LEVELS

Contaminant	Reporting units
Air and Other Non-condensables.	1.5% by volume @ 25 °C (N/A for refrigerants used in low-pressure appliances ¹).
Water	10 ppm by weight 20 ppm by weight (for refrigerants used in low-pressure appliances ¹).
Other Impurities Including Refrigerant.	0.50% by weight.
High boiling residue	0.01% by volume.
Particulates/solids	visually clean to pass.
Acidity	1.0 ppm by weight.
Chlorides (chloride level for pass/fail is 3ppm).	No visible turbidity.

¹ Low-pressure appliances means an appliance that uses a refrigerant with a liquid phase saturation pressure below 45 psia at 104 °F.

BLEND COMPOSITIONS (WHERE APPLICABLE)

Nominal composition (by weight%)	Allowable composition (by weight%)
Component constitutes 25% or more	±2.0
Component constitutes less than 25% but greater than 10%	±1.0
Component constitutes less than or equal to 10%	±0.5

[69 FR 11988, Mar. 12, 2004]

APPENDIX B1 TO SUBPART F OF PART 82—PERFORMANCE OF REFRIGERANT RECOVERY, RECYCLING AND/OR RECLAIM EQUIPMENT

This appendix is based on the Air-Conditioning and Refrigeration Institute Standard 740-1993.

REFRIGERANT RECOVERY/RECYCLING EQUIPMENT

Section 1. Purpose

1.1 *Purpose.* The purpose of this standard is to establish methods of testing for rating and evaluating the performance of refrigerant recovery, and/or recycling equipment, and general equipment requirements (herein referred to as "equipment") for containment or purity levels, capacity, speed, and purge loss to minimize emission into the atmosphere of designated refrigerants.

1.1.1 This standard is intended for the guidance of the industry, including manufacturers, refrigerant reclaimers, repackers,

distributors, installers, servicemen, contractors and for consumers.

1.1.2 This standard is not intended to be used as a guide in defining maximum levels of contaminants in recycled or reclaimed refrigerants used in various applications.

1.2 *Review and Amendment.* This standard is subject to review and amendment as the technology advances.

Section 2. Scope

2.1 *Scope.* This standard defines general equipment requirements and the test apparatus, test mixtures, sampling and analysis techniques that will be used to determine the performance of recovery and/or recycling equipment for various refrigerants including R11, R12, R13, R22, R113, R114, R123, R134a, R500, R502, and R503, as referenced in the ANSI/ASHRAE Standard 34-1992, "Number Designation of Refrigerants" (American Society of Heating, Refrigerating, and Air Conditioning Engineers, Inc.).

Section 3. Definitions

3.1 *Recovered refrigerant.* Refrigerant that has been removed from a system for the purpose of storage, recycling, reclamation or transportation.

3.2 *Recover.* Reference 40 CFR 82.152.

3.3 *Recycle.* Reference 40 CFR 82.152.

3.4 *Reclaim.* Reference 40 CFR 82.152.

3.5 *Standard Contaminated Refrigerant Sample.* A mixture of new and/or reclaimed refrigerant and specified quantities of identified contaminants which are representative of field obtained, used refrigerant samples and which constitute the mixture to be processed by the equipment under test.

3.6 *Push/Pull Method.* The push/pull refrigerant recovery method is defined as the process of transferring liquid refrigerant from a refrigeration system to a receiving vessel by lowering the pressure in the vessel and raising the pressure in the system, and by connecting a separate line between the system liquid port and the receiving vessel.

3.7 *Recycle Rate.* The amount of refrigerant processed (in pounds) divided by the time elapsed in the recycling mode in pounds per minute. For equipment which uses a separate recycling sequence, the recycle rate does not include the recovery rate (or elapsed time). For equipment which does not use a separate recycling sequence, the recycle rate is a maximum rate based solely on the higher of the liquid or vapor recovery rate, by which the rated contaminant levels can be achieved.

3.8 *Equipment Classification.*

3.8.1 *Self Contained Equipment.* A refrigerant recovery or recycling system which is capable of refrigerant extraction without the assistance of components contained within an air conditioning or refrigeration system.

Pt. 82, Subpt. F, App. B1

40 CFR Ch. I (7–1–06 Edition)

3.8.2 *System Dependent Equipment.* Refrigerant recovery equipment which requires for its operation the assistance of components contained in an air conditioning or refrigeration system.

3.9 “*Shall*”, “*Should*”, “*Recommended*” or “*It is Recommended*”, “*Shall*” “*Should*”, “*recommended*”, or “*it is recommended*” shall be interpreted as follows:

3.9.1 *Shall.* Where “*shall*” or “*shall not*” is used for a provision specified, that provision is mandatory if compliance with the standard is claimed.

3.9.2 *Should, Recommended, or It is Recommended.* “*Should*”, “*recommended*”, is used to indicate provisions which are not mandatory but which are desirable as good practice.

Section 4. General Equipment Requirements

4.1 The equipment manufacturer shall provide operating instructions, necessary maintenance procedures, and source information for replacement parts and repair.

4.2 The equipment shall indicate when any filter/drier(s) needs replacement. This requirement can be met by use of a moisture transducer and indicator light, by use of a sight glass/moisture indicator, or by some measurement of the amount of refrigerant processed such as a flow meter or hour

meter. Written instructions such as “to change the filter every 400 pounds, or every 30 days” shall not be acceptable except for equipment in large systems where the Liquid Recovery Rate is greater than 25 lbs/min [11.3 Kg/min] where the filter/drier(s) would be changed for every job.

4.3 The equipment shall either automatically purge non-condensables if the rated level is exceeded or alert the operator that the non-condensable level has been exceeded. While air purge processes are subject to the requirements of this section, there is no specific requirement to include an air purge process for “recycle” equipment.

4.4 The equipment's refrigerant loss due to non-condensable purging shall not be exceeded 5% by weight of total recovered refrigerant. (See Section 9.4)

4.5 Internal hose assemblies shall not exceed a permeation rate of 12 pounds mass per square foot [5.8 g/cm²] of internal surface per year at a temperature of 120 F [48.8 °C] for any designated refrigerant.

4.6 The equipment shall be evaluated at 75 F [24 °C] per 7.1. Normal operating conditions range from 50 °F to 104 F [10 °C to 40 °C].

4.7 Exemptions:

4.7.1 Equipment intended for recovery only shall be exempt from sections 4.2 and 4.3.

TABLE 1—STANDARD CONTAMINATED REFRIGERANT SAMPLES

	R11	R12	R13	R22	R113	R114	R123	R134a	R500	R502	R503
Moisture content: PPM by weight of pure re- frigerant	100	80	30	200	100	85	100	200	200	200	30
Particulate content: PPM by weight of pure re- frigerant character- ized by ¹	80	80	80	80	80	80	80	80	80	80	80
Acid content: PPM by weight of pure re- frigerant— (mg KOH per kg refrig.) char- acterized by ²	500	100	NA	500	400	200	500	100	100	100	NA
Mineral oil content: % by weight of pure refriger- erant	20	5	NA	5	20	20	20	5	5	5	NA
Viscosity (SUS)	300	150	300	300	300	300	150	150	150	
Non conden- sable gases air content % volume ³ ≤	NA	3	3	3	NA	3	3	3	3	3	3

¹ Particulate content shall consist of inert materials and shall comply with particulate requirements in ASHRAE Standard 63.2, “Method of Testing of Filtration Capacity of Refrigerant Liquid Line Filters and Filter Driers.”

² Acid consists of 60% oleic acid and 40% hydrochloric acid on a total number basis.

³ Synthetic ester based oil.

Environmental Protection Agency**Pt. 82, Subpt. F, App. B1***Section 5. Contaminated Refrigerants*

5.1 The standard contaminated refrigerant sample shall have the characteristics specified in Table 1, except as provided in 5.2

5.2 Recovery equipment not rated for any specific contaminant can be tested with new or reclaimed refrigerant.

Section 6. Test Apparatus

6.1 Self Contained Equipment Test Apparatus. The apparatus as shown in Figure 1 consists of a 3 cubic foot [0.085 m³] mixing chamber with a conical-shaped bottom, although a larger mixing chamber is permissible. The size of the mixing chamber depends upon the size of the equipment. The outlet at the bottom of the cone and all restrictions and valves for liquid and vapor refrigerant lines in the test apparatus shall be a minimum of 0.375 in. [9.5 mm] inside diameter or equivalent. The minimum inside diameter for large equipment for use on chillers shall be 1.5 in. [38 mm.]. The mixing chamber shall contain various ports for receiving liquid refrigerant, oil, and contaminants. A recirculating line connected from the bottom outlet through a recirculating pump and then to a top vapor port shall be provided for stirring of the mixture. Isolation valves may be required for the pump. Alternative stirring means may be used if demonstrated to be equally effective.

6.1.1 For liquid refrigerant feed, the liquid valve is opened. For vapor refrigerant feed,

the vapor valve is opened and refrigerant passes through an evaporator coil. Flow is controlled by a thermostatic expansion valve to create 5 F [3 °C] superheat at an evaporator temperature of 70 F ±3 F [21 °C±2°]. The evaporator coil or equivalent evaporator means shall be either sized large enough for the largest system or be sized for each system.

6.1.2 An alternative method for vapor refrigerant feed is to pass through a boiler and then an automatic pressure regulating valve set at refrigerant saturation pressure at 75 F ±3 F [24 °C ±2 °C].

6.2 System Dependent Equipment Test Apparatus. This test apparatus is to be used for final recovery vacuum rating of all system dependent equipment.

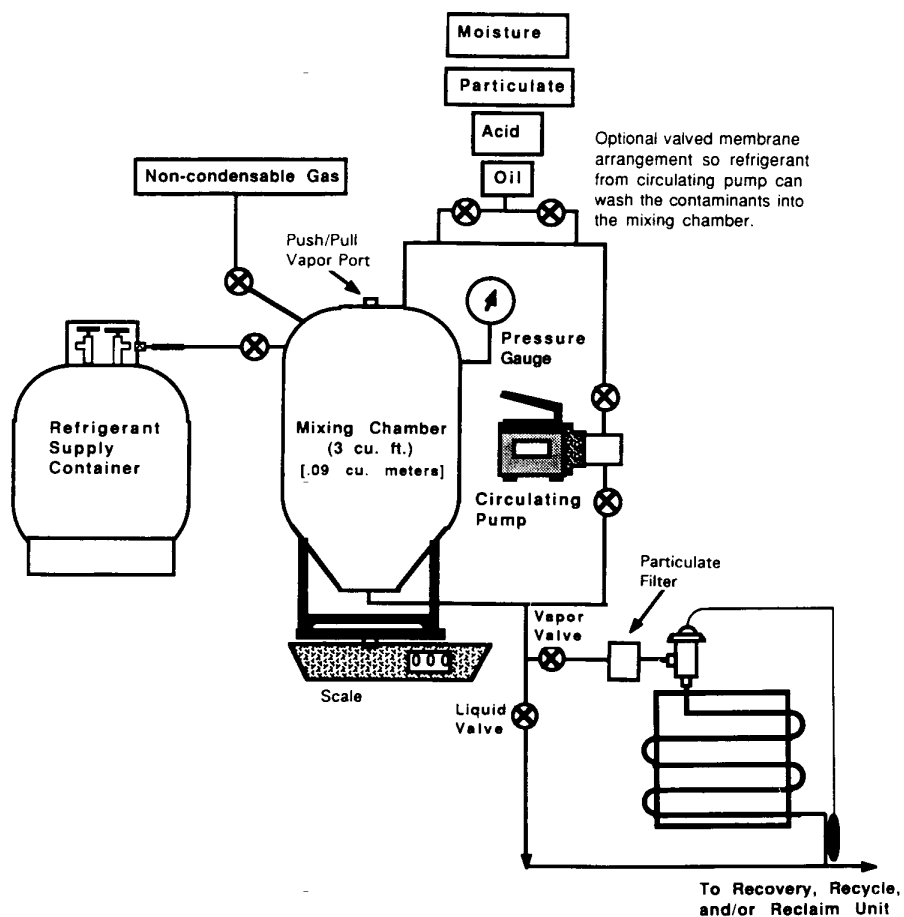
6.2.1 The test apparatus shown in Figure 2 consists of a complete refrigeration system. The manufacturer shall identify the refrigerants to be tested. The test apparatus can be modified to facilitate operation or testing of the system dependent equipment if the modifications to the apparatus are specifically described within the manufacturer's literature. (See Figure 2.) A ¼ inch [6.3 mm] balance line shall be connected across the test apparatus between the high and low pressure sides, with an isolation valve located at the connection to the compressor high side. A ¼ inch [6.3 mm] access port with a valve core shall be located in the balance line for the purpose of measuring final recovery vacuum at the conclusion of the test.

Pt. 82, Subpt. F, App. B1

40 CFR Ch. I (7-1-06 Edition)

FIGURE 1

Test Apparatus for Self-Contained Equipment



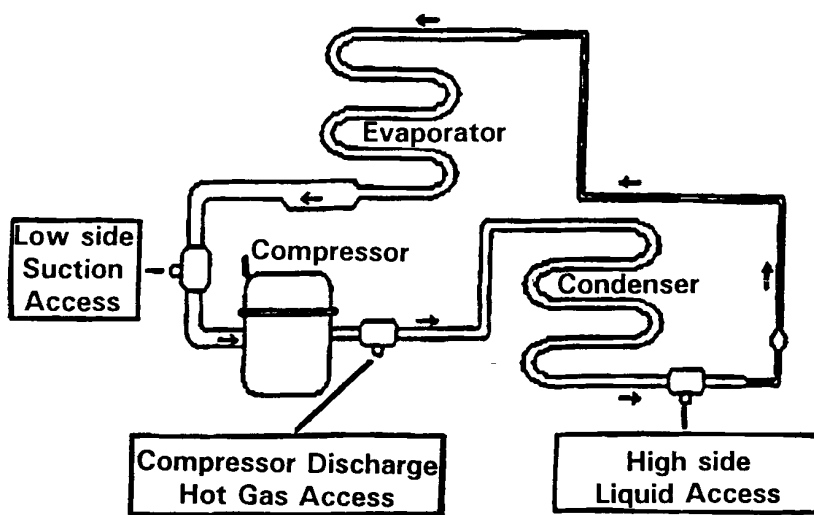
Environmental Protection Agency

Pt. 82, Subpt. F, App. B1

FIGURE 2

System-Dependent Equipment Test Apparatus

Configuration of a standard air conditioning or refrigeration system for use as a test apparatus



Section 7. Performance Testing

7.1 Contaminant removal and performance testing shall be conducted at 75 F \pm 2 F [23.9 $^{\circ}$ C \pm 1.1 $^{\circ}$ C].

7.1.1 The equipment shall be prepared for operation per the instruction manual.

7.1.2 The contaminated sample batch shall consist of not less than the sum of the amounts required to complete steps 7.1.2.2 and 7.1.2.3 below.

7.1.2.1 A liquid sample shall be drawn from the mixing chamber prior to starting the test to assure quality control of the mixing process.

7.1.2.2 Vapor refrigerant feed testing, if elected, shall normally be processed first. After the equipment reaches stabilized conditions of condensing temperature and/or storage tank pressure, the vapor feed recovery rate shall be measured. One method is to start measuring the vapor refrigerant recovery rate when 85% of refrigerant remains in the mixing chamber and continue for a period of time sufficient to achieve the accuracy in 9.2. If liquid feed is not elected, complete Step 7.1.2.4.

7.1.2.3 Liquid refrigerant feed testing, if elected, shall be processed next. After the equipment reaches stabilized conditions, the liquid feed recovery rate shall be measured. One method is to wait 2 minutes after starting liquid feed and then measure the liquid refrigerant recovery rate for a period of time sufficient to achieve the accuracy in 9.1. Continue liquid recovery operation as called for in 7.1.2.4.

7.1.2.4 Continue recovery operation until all liquid is removed from the mixing chamber and vapor is removed to the point where the equipment shuts down per automatic means or is manually stopped per the operating instructions.

7.1.2.5 After collecting the first contaminated refrigerant sample batch, the liquid and vapor value of the apparatus shall be closed and the mixing chamber pressure recorded after 1 minute as required in 9.5. After preparing a second contaminated refrigerant sample batch, continue recovery until the storage container reaches 80% liquid fill level. After recycling and measuring

Pt. 82, Subpt. F, App. B1**40 CFR Ch. I (7-1-06 Edition)**

the recycle rate per section 7.1.3, set this container aside for the vapor sample in 8.2.2.

7.1.2.6 Interruptions in equipment operations as called for in instruction manual are allowable.

7.1.3 Recycle as called for in equipment operating instructions. Determine recycle rate by appropriate means as required in 9.3.

7.1.4 Repeat steps 7.1.2, 7.1.2.4, and 7.1.3 with contaminated refrigerant sample until equipment indicator(s) show need to change filter(s). It will not be necessary to repeat the recycle rate determination in 7.1.3.

7.1.4.1 For equipment with a multiple pass recirculating filter system, analyze the contents of the previous storage container.

7.1.4.2 For equipment with a single pass filter system, analyze the contents of the current storage container.

7.1.5 Refrigerant loss due to the equipment's non-condensable gas purge shall be determined by appropriate means. (See Section 9.4.)

7.2 System Dependent Equipment. This procedure shall be used for vacuum rating of all system dependent equipment. Liquid refrigerant recovery rate, vapor refrigerant recovery rate, and recycle rate are not tested on system dependent systems.

7.2.1 The apparatus operation and testing shall be conducted at 75 F \pm 2 F. [23.9 °C. \pm 1.1. °C.].

7.2.2 The apparatus shall be charged with refrigerant per its system design specifications.

7.2.3 For measurement of final recovery vacuum as required in 9.5, first shut the balance line isolation valve and wait 1 minute for pressure to balance. Then connect and operate the recovery system per manufacturers recommendations. When the evacuation is completed, open the balance line isolation valve and measure the pressure in the balance line.

Section 8. Sampling and Chemical Analysis Methods

8.1 The referee test methods for the various contaminants are summarized in the following paragraphs. Detailed test procedures are included in Appendix A "Test Procedures for ARI STD 700." If alternate test methods are employed, the user must be able to demonstrate that they produce results equivalent to the specified referee method.

8.2 Refrigerant Sampling.

8.2.1 *Sampling Precautions.* Special precautions should be taken to assure that representative samples are obtained for analysis. Sampling shall be done by trained laboratory personnel following accepted sampling and safety procedures.

8.2.2 *Gas Phase Sample.* A gas phase sample shall be obtained for determining the non-condensables. Since non-condensable gases, if present, will concentrate in the vapor phase of the refrigerant, care must be exer-

cised to eliminate introduction of air during the sample transfer. Purging is not an acceptable procedure for a gas phase sample since it may introduce a foreign product. Since R11, R113 and R123 have normal boiling points at or above room temperature, non-condensable determination is not required for these refrigerants.

8.2.2.1 The sample cylinder shall be connected to an evacuated gas sampling bulb by means of a manifold. The manifold should have a valve arrangement that facilitates evacuation of all connecting tubing leading to the sampling bulb.

8.2.2.2 After the manifold has been evacuated, close the valve to the pump and open the valve on the system. Allow the pressure to equilibrate and close valves.

8.2.3 *Liquid Phase Sample.* A liquid phase sample is required for all tests listed in this standard, except the test for non-condensables.

8.2.3.1 Place an empty sample cylinder with the valve open in an oven at 230 F [110 °C] for one hour. Remove it from the oven while hot, immediately connect to an evacuation system and evacuate to less than 1mm. mercury (1000 microns). Close the valve and allow it to cool.

8.2.3.2 The valve and lines from the unit to be sampled shall be clean and dry. Connect the line to the sample cylinder loosely. Purge through the loose connection. Make the connection tight at the end of the purge period. Take the sample as a liquid by chilling the sample cylinder slightly. Accurate analysis requires that the sample container be filled to at least 60% by volume; however under no circumstances should the cylinder be filled to more than 80% by volume. This can be accomplished by weighing the empty cylinder and then the cylinder with refrigerant. When the desired amount of refrigerant has been collected, close the valve(s) and disconnect the sample cylinder immediately.

8.2.3.3 Check the sample cylinder for leaks and record the gross weight.

8.3 Water Content.

8.3.1. The Coulometric Karl Fischer Titration shall be the primary test method for determining the water content of refrigerants. This method is described in Appendix A. This method can be used for refrigerants that are either a liquid or a gas at room temperature, including Refrigerants 11 and 13. For all refrigerants, the sample for water analysis shall be taken from the liquid phase of the container to be tested. Proper operation of the analytical method requires special equipment and an experienced operator. The precision of the results is excellent if proper sampling and handling procedures are followed. Refrigerants containing a colored dye can be successfully analyzed for water using this method.

Environmental Protection Agency**Pt. 82, Subpt. F, App. B1**

8.3.2 The Karl Fischer Test Method is an acceptable alternative test method for determining the water content of refrigerants. This method is described in ASTM Standard for "Water in gases Using Karl Fisher Reagent" E700-79, reapproved 1984 (American Society for Testing and Materials, Philadelphia, PA).

8.3.3 Report the moisture level in parts per million by weight if a sample is required.

8.4 *Chloride*. The refrigerant shall be tested for chlorides as an indication of the presence of hydrochloric or similar acids. The recommended procedure is intended for use with new or reclaimed refrigerants. Significant amounts of oil may interfere with the results by indicating a failure in the absence of chlorides.

8.4.1 The test method shall be that described in Appendix A "Test Procedures for ARI-700." The test will show noticeable turbidity at equivalent chloride levels of about 3 ppm by weight or higher.

8.4.2 The results of the test shall not exhibit any sign of turbidity. Report results as "pass" or "fail."

8.5 *Acidity*.

8.5.1 The acidity test uses the titration principle to detect any compound that is highly soluble in water and ionizes as an acid. The test method shall be that described in Appendix A. "Test Procedures for ARI-700." The test may not be suitable for determination of high molecular weight organic acids; however these acids will be found in the high boiling residue test outlined in Section 5.7. The test requires about a 100 to 120 gram sample and has a low detection limit of 0.1 ppm by weight as HCl.

8.6 *High Boiling Residue*.

8.6.1 High boiling residue will be determined by measuring the residue of a standard volume of refrigerant after evaporation. The refrigerant sample shall be evaporated at room temperature or a temperature 50 F [10°C], above the boiling point of the sample using a Goetz tube as specified in Appendix A "Test Procedures for ARI-700." Oils and or organic acids will be captured by this method.

8.6.2 The value for high boiling residue shall be expressed as a percentage by volume.

8.7 *Particulates/Solids*.

8.7.1 A measured amount of sample is evaporated from a Goetz bulb under controlled temperature conditions. The particulates/solids shall be determined by visual examination of the empty Goetz bulb after the sample has evaporated completely. Presence of dirt, rust or other particulate contamination is reported a "fail." For details of this test method, refer to Appendix B "Test Procedures for ARI-700."

8.8 *Non-Condensables*

8.8.1 A vapor phase sample shall be used for determination of non-condensables. Non-

condensable gases consist primarily of air accumulated in the vapor phase of refrigerant containing tanks. The solubility of air in the refrigerants liquid phase is extremely low and air is not significant as a liquid phase contaminant. The presence of non-condensable gases may reflect poor quality control in transferring refrigerants to storage tanks and cylinders.

8.8.2 The test method shall be gas chromatography with a thermal conductivity detector as described in Appendix A "Test Procedures for ARI-700."

8.8.2.1 The Federal Specification for "Fluorocarbon Refrigerants," BB-F-1421B, dated March 5, 1992, section 4.4.2 (perchloroethylene method) is an acceptable alternate test method.

8.8.3 Report the level of non-condensable as percent by volume.

Section 9. Performance Calculation and Rating

9.1 The liquid refrigerant recovery rate shall be expressed in pounds per minute [kg/min] and measured by weight change at the mixing chamber (See Figure 1) divided by elapsed time to an accuracy within .02 lbs/min. [.009 kg/min]. Ratings using the Push/Pull method shall be identified "Push/Pull". Equipment may be rated by both methods.

9.2 The vapor refrigerant recovery rate shall be expressed in pounds per minute [kg/min] and measured by weight change at the mixing chamber (See Figure 1) divided by elapsed time to an accuracy within .02 lbs/min. [.009 kg/min].

9.3 The recycle rate is defined in 3.7 and expressed in pounds per minute [kg/min] of flow and shall be per ASHRAE 41.7-84 "Procedure For Fluid Measurement Of Gases" or ASHRAE 41.8-89 "Standard Method of Flow of Fluids—Liquids."

9.3.1 For equipment using multipass recycling or a separate sequence, the recycle rate shall be determined by dividing the net weight W of the refrigerant to be recycled by the actual time T required to recycle the refrigerant. Any set-up or operator interruptions shall not be included in the time T. The accuracy of the recycle rate shall be within .02 lbs/min. [.009 kg/min].

9.3.2 If no separate recycling sequence is used, the recycle rate shall be the higher of the vapor refrigerant recovery rate or the liquid refrigerant recovery rate. The recycle rate shall match a process which leads to contaminant levels in 9.6. Specifically, a recovery rate determined from bypassing a contaminant removal device cannot be used as a recycle rate when the contaminant levels in 9.6 are determined by passing the refrigerant through the containment removal device.

9.4 Refrigerant loss due to non-condensable purging shall be less than 5%. This rating shall be expressed as "passed" if less than 5%.

Pt. 82, Subpt. F, App. B1**40 CFR Ch. I (7–1–06 Edition)**

This calculation will be based upon net loss of non-condensables and refrigerant due to the purge divided by the initial net content. The net loss shall be determined by weighing before and after the purge, by collecting purged gases, or an equivalent method.

9.5 The final recovery vacuum shall be the mixing chamber pressure called for in 7.1.2.5 expressed in inches of mercury vacuum, [mm Hg or kPa]. The accuracy of the measurement shall be within ± 1 inch [± 2.5 mm] of Hg and rounding down to the nearest whole number.

9.6 The contaminant levels remaining after testing shall be published as follows:

Moisture content, PPM by weight
Chloride ions, Pass/Fail
Acidity, PPM by weight

High boiling residue, percentage by volume
Particulate/solid, Pass/Fail
Non-condensables, % by volume

9.7 Product Literature: Except as provided under product labelling in Section 11, performance ratings per 9.1, 9.2, 9.3, and 9.5 must be grouped together and shown for all listed refrigerants (11.2) subject to limitations of 9.8. Wherever any contaminant levels per 9.6 are rated, all ratings in 9.6 must be shown for all listed refrigerants subject to limitations of 9.8. The type of equipment in 11.1 must be included with either grouping. Optional ratings in 9.8 need not be shown.

9.8 Ratings shall include all of the parameters for each designed refrigerant in 11.2 as shown in Tables 2 and 3.

TABLE 2—PERFORMANCE

Parameter/type of equipment	Recovery	Recovery/ recycle	Recycle	System dependent equipment
Liquid refrigerant recovery rate	(2)	(2)	N/A	N/A
Vapor refrigerant recovery rate	(2)	(2)	N/A	N/A
Final recovery vacuum	(1)	(1)	N/A	(1)
Recycle rate	N/A	(1)	(1)	N/A
Refrigerant loss due to non-condensable purging	(3)	(1)	(1)	N/A

¹ Mandatory rating.

² For a recovery or recovery/recycle unit, one must rate for either liquid feed only or vapor feed only or can rate for both. If rating only the one, the other shall be indicated by "N/A."

³ For Recovery Equipment, these parameters are optional. If not rated, use N/A.

TABLE 3—CONTAMINANTS

Contaminant/type of equipment	Recovery	Recovery/ recycle	Recycle	System dependent equipment
Moisture content	(*)	x	x	NA.
Chloride ions	(*)	x	x	NA.
Acidity	(*)	x	x	NA.
High boiling residue	(*)	x	x	NA.
Particulates	(*)	x	x	NA.
Non-condensables	(*)	x	x	NA.

*For Recovery Equipment, these parameters are optional. If not rated, use N/A.

xMandatory rating.

Section 10. Tolerances

10.1 Any equipment tested shall produce contaminant levels not higher than the published ratings. The liquid refrigerant recovery rate, vapor refrigerant recovery rate, final recovery vacuum and recycle rate shall not be less than the published ratings.

Section 11. Product Labelling

11.1 *Type of equipment.* The type of equipment shall be as listed:

- 11.1.1 Recovery only
- 11.1.2 System Dependent Recovery
- 11.1.3 Recovery/Recycle
- 11.1.4 Recycle only

11.2 Designated refrigerants and the following as applicable for each:

- 11.2.1 Liquid Recovery Rate
- 11.2.2 Vapor Recovery Rate
- 11.2.3 Final Recovery Vacuum
- 11.2.4 Recycle Rate

11.3 The nameplate shall also conform to the labeling requirements established for certified recycling and recovery equipment established at 40 CFR 82.158(h).

ATTACHMENT TO APPENDIX B1

Particulate Used in Standard Contaminated Refrigerant Sample.

Environmental Protection Agency**Pt. 82, Subpt. F, App. B2***1. Particulate Specification*

1.1 The particulate material pm will be a blend of 50% coarse air cleaner dust as received, and 50% retained on a 200-mesh screen. The coarse air cleaner dust is available from: AC Spark Plug Division, General Motors Corporation, Flint, Michigan.

1.2 Preparation of Particulate Materials

To prepare the blend of contaminant, first wet screen a quantity of coarse air cleaner dust on a 200-mesh screen (particle retention 74 µm). This is done by placing a portion of the dust on a 200-mesh screen and running water through the screen while stirring the dust with the fingers. The fine contaminant particles passing through the screen are discarded. The +200 mesh particles collected on the screen are removed and dried for one hour at 230 F [110 °C]. The blend of standard contaminant is prepared by mixing 50% by weight of coarse air cleaner dust as received after drying for one hour at 230 F [110 °C] with 50% by weight of the +200 mesh screened dust.

1.3 The coarse air cleaner dust as received and the blend used as the standard contaminant have the following approximate particle size analysis: Wt. % in various size ranges, µm.

Size range	As received	Blend
0-5	12	6
5-10	12	6
10-20	14	7
20-40	23	11
40-80	30	32
80-200	9	38

[58 FR 28712, May 14, 1993, as amended at 59 FR 42960, Aug. 19, 1994. Redesignated and amended at 68 FR 43815, July 24, 2003]

APPENDIX B2 TO SUBPART F OF PART 82—PERFORMANCE OF REFRIGERANT RECOVERY, RECYCLING, AND/OR RECLAIM EQUIPMENT

This appendix is based on the Air-Conditioning and Refrigeration Institute Standard 740-1995.

Section 1. Purpose

1.1 *Purpose.* The purpose of this standard is to establish methods of testing for rating and evaluating the performance of refrigerant recovery, and/or recycling equipment and general equipment requirements (herein referred to as "equipment") for contaminant or purity levels, capacity, speed and purge loss to minimize emission into the atmosphere of designated refrigerants.

Section 2. Scope

2.1 *Scope.* This standard applies to equipment for recovering and/or recycling single refrigerants, azeotropics, zeotropic blends, and their normal contaminants from refrigerant systems. This standard defines the test apparatus, test gas mixtures, sampling procedures and analytical techniques that will be used to determine the performance of refrigerant recovery and/or recycling equipment (hereinafter, "equipment").

Section 3. Definitions

3.1 *Definitions.* All terms in this appendix will follow the definitions in §82.152 unless otherwise defined in this appendix.

3.2 *Clearing Refrigerant.* Procedures used to remove trapped refrigerant from equipment before switching from one refrigerant to another.

3.3 *High Temperature Vapor Recovery Rate.* For equipment having at least one designated refrigerant (see 11.2) with a boiling point in the range of -50 to +10 °C, the rate will be measured for R-22, or the lowest boiling point refrigerant if R-22 is not a designated refrigerant.

3.4 *Published Ratings.* A statement of the assigned values of those performance characteristics, under stated rating conditions, by which a unit may be chosen to fit its application. These values apply to all units of like nominal size and type (identification) produced by the same manufacturer. As used herein, the term "published rating" includes the rating of all performance characteristics shown on the unit or published in specifications, advertising or other literature controlled by the manufacturer, at stated rating conditions.

3.5 *Push/Pull Method.* The push/pull refrigerant recovery method is defined as the process of transferring liquid refrigerant from a refrigeration system to a receiving vessel by lowering the pressure in the vessel and raising the pressure in the system, and by connecting a separate line between the system liquid port and the receiving vessel.

3.6 *Recycle Flow Rate.* The amount of refrigerant processed divided by the time elapsed in the recycling mode. For equipment which uses a separate recycling sequence, the recycle rate does not include the recovery rate (or elapsed time). For equipment which does not use a separate recycling sequence, the recycle rate is a rate based solely on the higher of the liquid or vapor recovery rate, by which the contaminant levels were measured.

3.7 *Residual Trapped Refrigerant.* Refrigerant remaining in equipment after clearing.

3.8 *Shall, Should, Recommended or It Is Recommended* shall be interpreted as follows:

3.8.1 *Shall.* Where "shall" or "shall not" is used for a provision specified, that provision

Pt. 82, Subpt. F, App. B2**40 CFR Ch. I (7-1-06 Edition)**

is mandatory if compliance with this appendix is claimed.

3.8.2 *Should, Recommended or It Is Recommended* is used to indicate provisions which are not mandatory but which are desirable as good practice.

3.9 **Standard Contaminated Refrigerant Sample.** A mixture of new or reclaimed refrigerant and specified quantities of identified contaminants which constitute the mixture to be processed by the equipment under test. These contaminant levels are expected only from severe service conditions.

3.10 **Trapped Refrigerant.** The amount of refrigerant remaining in the equipment after the recovery or recovery/recycling operation but before clearing.

3.11 **Vapor Recovery Rate.** The average rate that refrigerant is withdrawn from the mixing chamber between two pressures as vapor recovery rate is changing pressure and temperature starting at saturated conditions either 24 °C or at the boiling point 100 kPa (abs), whichever is higher. The final pressure condition is 10% of the initial pressure, but not lower than the equipment final recovery vacuum and not higher than 100 kPa (abs).

Section 4. General Equipment Requirements

4.1 **Equipment Information.** The equipment manufacturer shall provide operating instructions, necessary maintenance procedures and source information for replacement parts and repair.

4.2 **Filter Replacement.** The equipment shall indicate when any filter/drier(s) needs replacement. This requirement can be met by use of a moisture transducer and indicator light, by use of a sight glass/moisture indicator or by some measurement of the amount of refrigerant processed such as a flow meter or hour meter. Written instructions such as "to change the filter every 181 kg, or every 30 days" shall not be acceptable except for equipment in large systems where the liquid recovery rate is greater than 11.3 kg/min where the filter/drier(s) would be changed for every job.

4.3 **Purge of Non-Condensable.** If non-condensables are purged, the equipment shall either automatically purge non-condensables or provide indicating means to guide the purge process.

4.4 **Purge Loss.** The total refrigerant loss due to purging non-condensables, draining oil and clearing refrigerant (see 9.5) shall be less than 3% (by weight) of total processed refrigerant.

4.5 **Permeation Rate.** High pressure hose assemblies $\frac{1}{8}$ in. [16 mm] nominal and smaller shall not exceed a permeation rate of 3.9 g/cm²/yr (internal surface) at a temperature of 48.8 °C. Hose assemblies that UL recognized as having passed ANSI/UL 1963 requirements shall be accepted without testing. See 7.1.4.

4.6 **Clearing Trapped Refrigerant.** For equipment rated for more than one refrigerant,

the manufacturer shall provide a method and instructions which will accomplish connections and clearing within 15 minutes. Special equipment, other than a vacuum pump or manifold gauge set shall be furnished. The clearing procedure shall not rely upon the storage cylinder below saturated pressure conditions at ambient temperature.

4.7 **Temperature.** The equipment shall be evaluated at 24 °C with additional limited evaluation at 40 °C. Normal operating conditions range from 10 °C to 40 °C.

4.8 **Exemptions.** Equipment intended for recovery only shall be exempt from 4.2 and 4.3.

Section 5. Contaminated Refrigerants

5.1 **Sample Characteristics.** The standard contaminated refrigerant sample shall have the characteristics specified in Table 1, except as provided in 5.2.

5.2 **Recovery-Only Testing.** Recovery equipment not rated for any specific contaminant shall be tested with new or reclaimed refrigerant.

Section 6. Test Apparatus

6.1 **General Recommendations.** The recommended test apparatus is described in the following paragraphs. If alternate test apparatus are employed, the user shall be able to demonstrate that they produce results equivalent to the specified referee apparatus.

6.2 **Self-Contained Equipment Test Apparatus.** The apparatus, shown in Figure 1, shall consist of:

6.2.1 **Mixing Chamber.** A mixing chamber consisting of a tank with a conical-shaped bottom, a bottom port and piping for delivering refrigerant to the equipment, various ports and valves for adding refrigerant to the chamber and stirring means for mixing.

6.2.2 **Filling Storage Cylinder.** The storage cylinder to be filled by the refrigerant transferred shall be cleaned and at the pressure of the recovered refrigerant at the beginning of the test. It will not be filled over 80%, by volume.

6.2.3 **Vapor Feed.** Vapor refrigerant feed consisting of evaporator, control valves and piping to create a 3.0 °C superheat condition at an evaporating temperature of 21 °C \pm 2K.

6.2.4 **Alternative Vapor Feed.** An alternative method for vapor feed shall be to pass the refrigerant through a boiler and then through an automatic pressure regulating valve set at different saturation pressures, moving from saturated pressure at 24 °C to final pressure of recovery.

6.2.5 **Liquid Feed.** Liquid refrigerant feed consisting of control valves, sampling port and piping.

6.2.6 **Instrumentation.** Instrumentation capable of measuring weight, temperature, pressure and refrigerant loss, as required.

Environmental Protection Agency

Pt. 82, Subpt. F, App. B2

TABLE 1—STANDARD CONTAMINATED REFRIGERANT SAMPLES

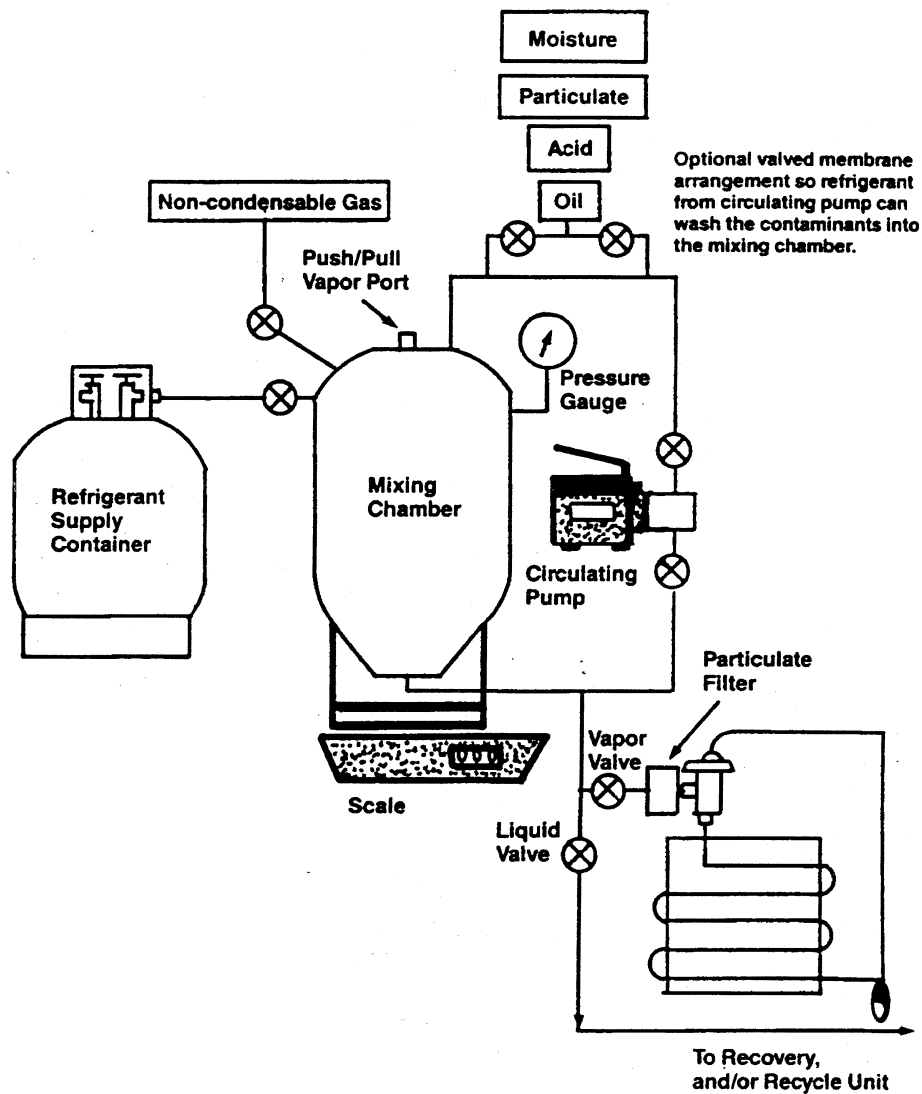
	R11	R12	R13	R22	R113	R114	R123	R134a	R500	R502	R503
Moisture Content: ppm by Weight of Pure refrigerant	100	80	30	200	100	85	200	200	200	200	30
Particulate Content: ppm by Weight of Pure Refrigerant Characterized by ¹	80	80	NA	80	80	80	80	80	80	80	NA
Acid Content: ppm by Weight of Pure Refrigerant—(mg KOH per kg Refrigerant) Character- ized by ²	500	100	NA	500	400	200	500	100	100	100	NA
Mineral Oil Content: % by Weight of Pure Refrigerant	20	5	NA	5	20	20	20	5	5	5	NA
Viscosity (SUS)	300	150	300	300	300	300	150 ³	150	150	
Non-Condensable Gases (Air Content): % by Vol- ume	NA	3	3	3	NA	3	NA	3	3	3	3

¹ Particulate content shall consist of inert materials and shall comply with particulate requirements in appendix B.² Acid consists of 60% oleic acid and 40% hydrochloric acid on a total number basis.³ Synthetic ester-based oil.

Pt. 82, Subpt. F, App. B2

40 CFR Ch. I (7-1-06 Edition)

Figure 1. Test Apparatus for Self-Contained Equipment



6.3 *Size.* The size of the mixing chamber shall be a minimum of .09 m³. The bottom port and the refrigerant feed shall depend on the size of the equipment. Typically, the mixing valves and piping shall be 9.5 mm. For large equipment to be used on chillers, the minimum inside diameter of ports,

valves and pipings shall be the smaller of the manufacturer's recommendation or 37 mm.

6.4 *System Dependent Equipment Test Apparatus.* This test apparatus is to be used for final recovery vacuum rating of all system dependent equipment.

Environmental Protection Agency**Pt. 82, Subpt. F, App. B2**

6.4.1 *Test Setup.* The test apparatus shown in Figure 2 consists of a complete refrigeration system. The manufacturer shall identify the refrigerants to be tested. The test apparatus can be modified to facilitate operation or testing of the system dependent equipment if the modifications to the apparatus are specifically described within the manufacturer's literature. (See Figure 2.) A 6.3 mm balance line shall be connected across the test apparatus between the high and low-pressure sides, with an isolation valve located at the connection to the compressor high side. A 6.3 mm access port with a valve core shall be located in the balance line for the purpose of measuring final recovery vacuum at the conclusion of the test.

Section 7. Performance Testing**7.1 General Testing.**

7.1.1 *Temperatures.* Testing shall be conducted at an ambient temperature of 24 °C ±1K except high temperature vapor recovery shall be at 40 °C ±1K. The evaporator conditions of 6.2.3 shall be maintained as long as liquid refrigerant remains in the mixing chamber.

7.1.2 *Refrigerants.* The equipment shall be tested for all designated refrigerants (see 11.2). All tests in Section 7 shall be completed for each refrigerant before starting tests with the next refrigerant.

7.1.3 *Selected Tests.* Tests shall be as appropriate for the equipment type and ratings parameters selected (see 9.9, 11.1 and 11.2).

7.1.4 *Hose Assemblies.* For the purpose of limiting refrigerant emissions to the atmosphere, hose assemblies shall be tested for permeation according to ANSI/UL Standard 1963, Section 40.10.

7.2 *Equipment Preparation and Operation.* The equipment shall be prepared and operated per the operating instructions.

7.3 *Test Batch.* The test batch consisting of refrigerant sample (see Section 5) of the

test refrigerant shall be prepared and thoroughly mixed. Continued mixing or stirring shall be required during the test while liquid refrigerant remains in the mixing chamber. The mixing chamber shall be filled to 80% level by volume.

7.3.1 *Control Test Batch.* Prior to starting the test for the first batch for each refrigerant, a liquid sample will be drawn from the mixing chamber and analyzed per Section 8 to assure that contaminant levels match Table 1 within ±10 ppm for moisture, ±20 ppm for particulate, ±20 ppm for oleic acid and ±0.5% for oil.

7.4 *Recovery Tests (Recovery and Recovery/Recycle Equipment).*

7.4.1 *Determining Recovery Rates.* The liquid and vapor refrigerant recovery rates shall be measured during the first test batch for each refrigerant (see 9.1, 9.2 and 9.4). Equipment preparation and recovery cylinder changeover shall not be included in elapsed time measurements for determining vapor recovery rate and liquid refrigerant recovery rate. Operations such as subcooling the recovery cylinder shall be included. Recovery cylinder shall be the same size as normally furnished or specified in the instructions by the equipment manufacturer. Oversized tanks shall not be permitted.

7.4.1.1 *Liquid Refrigerant Recovery Rate.* If elected, the recovery rate using the liquid refrigerant feed means (see 6.2.5) shall be determined. After the equipment reaches stabilized conditions of condensing temperature and/or recovery cylinder pressure, the recovery process shall be stopped and an initial weight shall be taken of the mixing chamber (see 9.2). The recovery process shall be continued for a period of time sufficient to achieve the accuracy in 9.4. The recovery process shall be stopped and a final weight shall be taken of the mixing chamber.

Pt. 82, Subpt. F, App. B2

40 CFR Ch. I (7-1-06 Edition)

**Configuration of standard air conditioning or
refrigeration system for use as a test apparatus**

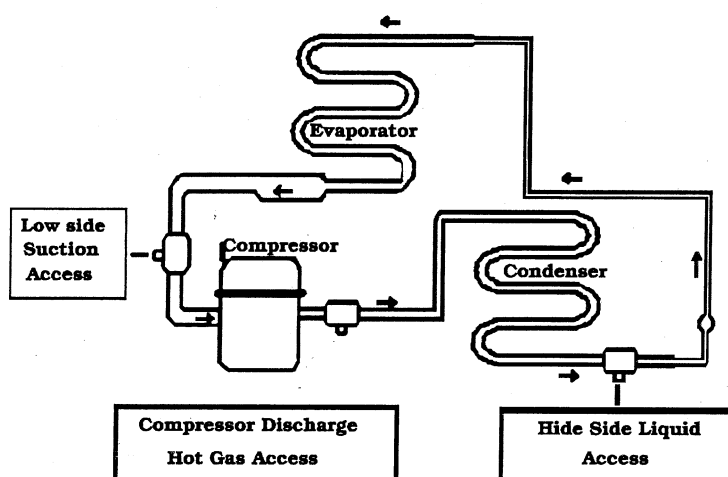


Figure 2. System Dependent Equipment Test Apparatus

7.4.1.2 Vapor Refrigerant Recovery Rate. If elected, the average vapor flow rate shall be measured to accuracy requirements in clause 9.4 under conditions with no liquid refrigerant in the mixing chamber. The liquid recovery feed means shall be used. At initial conditions of saturated vapor at the higher of 24 °C or the boiling temperature (100 kPa absolute pressure), the weight of the mixing chamber and the pressure shall be recorded. At final conditions representing pressure in the mixing chamber of 10% of the initial condition, but not less than the final recovery vacuum (see 9.6) nor more than 100 kPa, measure the weight of the mixing chamber and the elapsed time.

7.4.1.3 High Temperature Vapor Recovery Rate. Applicable for equipment having at least one designated refrigerant (see 11.2) with a boiling point between -50 °C and +10 °C. Measure the rate for R-22, or the refrigerant with the lowest boiling point if R-22 is not a designated refrigerant. Repeat the test in 7.4.1.2 at saturated conditions at 40 °C and continue to operate equipment to assure it will achieve the final recovery vacuum (see 7.4.3).

7.4.2 Recovery Operation. This test is for determining the final recovery vacuum and

the ability to remove contaminants as appropriate. If equipment is rated for liquid recovery (see 7.4.1.3), liquid recovery feed means described in 6.2.5 shall be used. If not, vapor recovery means described in 6.2.3 or 6.2.4 shall be used. Continue recovery operation until all liquid is removed from the test apparatus and vapor is removed to the point where equipment shuts down by automatic means or is manually shut off per operating instructions.

7.4.2.1 Oil Draining. Capture oil from the equipment at intervals as required in the instructions. Record the weight of the container. Completely remove refrigerant from oil by evacuation or other appropriate means. The weight difference shall be used in 9.5.2.

7.4.3 Final Recovery Vacuum. At the end of the first test batch for each refrigerant, the liquid valve and vapor valve of the apparatus shall be closed. After waiting 1 minute, the mixing chamber pressure shall be recorded (see 9.6).

7.4.4 Residual Refrigerant. This test will measure the mass of remaining refrigerant in the equipment after clearing and therefore the potential for mixing refrigerants (see 4.6).

Environmental Protection Agency**Pt. 82, Subpt. F, App. B2**

7.4.4.1 *Initial Conditions.* At the end of the last test for each batch for each refrigerant, the equipment shall be disconnected from the test apparatus (Figure 1). Recycle per 7.5, if appropriate. Perform refrigerant clearing operations as called for in the instruction manual. Capture and record the weight of any refrigerant which would have been emitted to the atmosphere during the clearing process for use in 9.5. If two loops are used for recycling, trapped refrigerant shall be measured for both.

7.4.4.2 *Residual Trapped Refrigerant.* Evacuate an empty test cylinder to 1.0 kPa absolute. Record the empty weight of the test cylinder. Open all valves to the equipment so as to provide access to all trapped refrigerant. Connect the equipment to the test cylinder and operate valves to recover the residual refrigerant. Record the weight of the test cylinder using a recovery cylinder pressure no less than specified in 6.2.2. Place the test cylinder in liquid nitrogen for a period of 30 minutes or until a vacuum of 1000 microns is reached, whichever occurs first.

7.5 *Recycling Tests (Recovery/Recycle Equipment).*

7.5.1 *Recycling Operation.* As each recovery cylinder is filled in 7.4.2, recycle according to operating instructions. There will not necessarily be a separate recycling sequence. Note non-condensable purge measurement in 9.5.

7.5.1.1 *Recycle Flow Rate.* While recycling the first recovery cylinder for each refrigerant, determine the recycling flow rate by appropriate means (see 9.3) to achieve the accuracy required in 9.4.

7.5.2 *Non-Condensable Sample.* After completing 7.4.3, prepare a second test batch (7.3). Recover per 7.4.2 until the current recovery cylinder is filled to 80% level by volume. Recycle per 7.5.1. Mark this cylinder and set aside for taking the vapor sample. For equipment having both an internal tank of at least 3 kg refrigerant capacity and an external recovery cylinder, two recovery cylinders shall be marked and set aside. The first is the cylinder described above. The second cylinder is the final recovery cylinder after filling it to 80% level by volume and recycling.

7.5.3 *Liquid Sample for Analysis.* Repeat steps 7.3, 7.4.2 and 7.5.1 with further test batches until indication means in 4.2 show the filter/drier(s) need replacing.

7.5.3.1 *Multiple Pass.* For equipment with a separate recycling circuit (multiple pass), set aside the current cylinder and draw the liquid sample (see 7.4) from the previous cylinder.

7.5.3.2 *Single Pass.* For equipment with the single pass recycling circuit, draw the liquid sample (see 7.4) from the current cylinder.

7.6 *Measuring Refrigerant Loss.* Refrigerant loss due to non-condensables shall be deter-

mined by appropriate means (see 9.5.1). The loss could occur in 7.4.1, 7.4.2 and 7.5.1.

Section 8. Sampling and Chemical Analysis Methods

8.1 *Chemical Analysis.* Chemical analysis methods shall be specified in appropriate standards such as ARI 700-95 and Appendix C to ARI Standard 700-95.

8.2 *Refrigerant Sampling.*

8.2.1 *Water Content.* The water content in refrigerant shall be measured by the Karl Fischer Analytical Method or by the Karl Fischer Coulometric techniques. Report the moisture level in parts per million by weight.

8.2.2 *Chloride Ions.* Chloride ions shall be measured by turbidity tests. At this time, quantitative results have not been defined. Report chloride content as "pass" or "fail." In the future, when quantitative results are possible, report chloride content as parts per million by weight.

8.2.3 *Acidity.* The acidity test uses the titration principle. Report the acidity in parts per million by weight (mg KOH/kg) of sample.

8.2.4 *High Boiling Residue.* High boiling residues shall use measurement of the volume of residue after evaporating a standard volume of refrigerant. Using weight measurement and converting to volumetric units is acceptable. Report high boiling residues as percent by volume.

8.2.5 *Particulates/Solids.* The particulates/solids measurement employs visual examination. Report results as "pass" or "fail."

8.2.6 *Non-condensables.* The level of contamination by non-condensable gases in the base refrigerant being recycled shall be determined by gas chromatography. Report results as percent by volume.

Section 9. Performance Calculation and Rating

9.1 *Vapor Refrigerant Recovery Rate.* This rate shall be measured by weight change of the mixing chamber divided by elapsed time (see 7.4.1.2). The units shall be kg/min and the accuracy shall be per 9.4.

9.1.1 *High Temperature Vapor Recovery Rate.*

9.2 *Liquid Refrigerant Recovery Rate.* This rate shall be measured by weight change of the mixing chamber divided by elapsed time (see 7.4.1.3). The units shall be kg/min and the accuracy shall be per 9.4.

9.3 *Recycle Flow Rate.* The recycle flow rate shall be as defined in 3.10, expressed in kg/min, and the accuracy shall be per 9.4.

9.3.1 For equipment using multi-pass recycling or a separate sequence, the recycle rate shall be determined by dividing the net weight W of the refrigerant to be recycled by the actual time T required to recycle. Any set-up or operator interruptions shall not be included in the time T.

Pt. 82, Subpt. F, App. B2

40 CFR Ch. I (7–1–06 Edition)

9.3.2 If no separate recycling sequence is used, the recycle rate shall be the higher of the vapor refrigerant recovery rate or the liquid refrigerant recovery rate. The recycle rate shall match a process which leads to contaminant levels in 9.9. Specifically, a recovery rate determined from bypassing a contaminant removal device cannot be used as a recycle rate when the contaminant levels in 9.9 are determined by passing the refrigerant through the contaminant removal device.

9.4 *Accuracy of Flow Rates.* The accuracy of test measurements in 9.1, 9.2 and 9.3 shall be ± 008 kg/min or flow rates up to .42 kg/min and $\pm 2.0\%$ for flow rates larger than .42 kg/min. Ratings shall be expressed to the nearest .02 kg/min.

9.5 *Refrigerant Loss.* This calculation will be based upon the net loss of refrigerant which would have been eliminated in the non-condensable purge process (see 7.5.1), the oil draining process (see 7.4.2.1) and the refrigerant clearing process (see 7.4.4.1), all divided by the net refrigerant content of the test batches. The refrigerant loss shall not exceed 3% by weight.

9.5.1 *Non-Condensable Purge.* Evacuate an empty container to 2 kPa absolute. Record the empty weight of the container. Place the container in a dry ice bath. Connect the equipment purge connection to the container and operate purge according to operating instructions so as to capture the non-condensables and lost refrigerant. Weigh the cylinder after the recycling is complete. Equivalent means are permissible.

9.5.2 *Oil Draining.* Refrigerant removed from the oil after draining shall be collected and measured in accordance with 7.4.2.1.

9.5.3 *Clearing Unit.* Refrigerant captured during the clearing process shall be measured in accordance with 7.4.4.1.

9.6 *Final Recovery Vacuum.* The final recovery vacuum shall be the mixing chamber pressure in 7.4.3 expressed in kPa. The accuracy of the measurement shall be within 0.33 kPa.

9.7 *Residual Trapped Refrigerant.* The amount of residual trapped refrigerant shall be the final weight minus the initial weight of the test cylinder in 7.4.4.2, expressed in kg. The accuracy shall be ± 0.02 kg and reported to the nearest 0.05 kg.

9.8 *Quantity Recycled.* The amount of refrigerant processed before changing filters (see 7.5.3) shall be expressed in kg to an accuracy of $\pm 1\%$.

9.9 *Contaminant Levels.* The contaminant levels remaining after testing shall be published as follows:

Moisture content, ppm by weight
Chloride ions, pass/fail
Acidity, ppm by weight
High boiling residue, % (by volume)
Particulates-solid, pass/fail (visual examination)
Non-condensables, % (by volume)

9.10 *Minimum Data Requirements for Published Ratings.* Published ratings shall include all of the parameters as shown in Tables 2 and 3 for each refrigerant designated by the manufacturer.

Section 10. Tolerances

10.1 *Tolerances.* Performance related parameters shall not be less favorable than the published ratings.

Section 11. Marking and Nameplate Data

11.1 *Marking and Nameplate Data.* The nameplate shall display the manufacturer's name, model designation, type of equipment, designated refrigerants, capacities and electrical characteristics where applicable. The nameplate shall also conform to the labeling requirements established for certified recycling and recovery equipment established at 40 CFR 82.158(h).

Recommended nameplate voltages for 60 Hertz systems shall include one or more of the utilization voltages shown in Table 1 of ARI Standard 110-90. Recommended nameplate voltages for 50 Hertz systems shall include one or more of the utilization voltages shown in Table 1 of IEC Standard Publication 38, IEC Standard Voltages.

11.2 *Data for Designated Refrigerants.* For each refrigerant designated, the manufacturer shall include all the following that are applicable per Table 2:

- Liquid Recovery Rate
- Vapor Recovery Rate
- High Temperature Vapor Recovery Rate
- Final Recovery Vacuum
- Recycle Flow Rate
- Residual Trapped Refrigerant
- Quantity Recycled

TABLE 2—PERFORMANCE

Parameter/Type of equipment	Recovery	Recovery/Recycle	Recycle	System dependent equipment
Liquid Refrigerant Recovery Rate	(1)	(1)	N/A	N/A
Vapor Refrigerant Recovery Rate	(1)	(1)	N/A	N/A
High Temp. Vapor Recovery Rate	(1)	(1)	N/A	N/A
Final Recovery Vacuum	(X)	(X)	N/A	(X)
Recycle Flow Rate	N/A	(X)	(X)	N/A
Refrigerant Loss	(3)	(X)	(X)	(3)

Environmental Protection Agency

Pt. 82, Subpt. F, App. B2

TABLE 2—PERFORMANCE—Continued

Parameter/Type of equipment	Recovery	Recovery/ Recycle	Recycle	System dependent equipment
Residual Trapped Refrigerant	(²)	(²)	(²)	(²)
Quantity Recycled	N/A	(²)	(²)	N/A

¹ Mandatory rating.

² For a recovery or recovery/recycle unit, one must rate either liquid refrigerant recovery rate or vapor refrigerant recovery rate or one can rate for both. If rating only the one, the other shall be indicated by N/A, "not applicable."

³ Mandatory rating for equipment tested for multiple refrigerants.

⁴ Mandatory rating if multiple refrigerants, oil separation or non-condensable purge are rated.

NOTE: For recovery equipment, these parameters are optional. If not rated use N/A, "not applicable."

TABLE 3—CONTAMINANTS

Contaminant/Type of equipment	Recovery	Recovery/ Recycle	Recycle	System dependent equipment
Moisture Content	(*)	(²)	(²)	N/A
Chloride Ions	(*)	(²)	(²)	N/A
Acidity	(*)	(²)	(²)	N/A
High Boiling Residue	(*)	(²)	(²)	N/A
Particulates	(*)	(²)	(²)	N/A
Non-Condensables	(*)	(²)	(²)	N/A

* For recovery equipment, these parameters are optional. If not rated, use N/A, "not applicable."

² Mandatory rating.

ATTACHMENT 1 TO APPENDIX B2 TO SUBPART F
OF PART 82—REFERENCES

Listed here are all standards, handbooks, and other publications essential to the formation and implementation of the standard. All references in this appendix are considered as part of this standard.

- ANSI/UL Standard 1963, *Refrigerant Recovery/Recycling Equipment*, First Edition, 1989, American National Standards Institute/Underwriters Laboratories, Inc.

- ARI Standard 110-90, *Air-Conditioning and Refrigerating Equipment Nameplate Voltages*, Air-Conditioning and Refrigeration Institute

- ARI Standard 700-95, *Specifications for Fluorocarbon and Other Refrigerants*, Air-Conditioning and Refrigeration Institute

- ASHRAE Terminology of Heating, Ventilation, Air Conditioning, Refrigeration, & Refrigeration, American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc., 1991

- IEC Standard Publication 38, *IEC Standard Voltages*, International Electrotechnical Commission, 1983

ATTACHMENT 2 TO APPENDIX B2 TO SUBPART F
OF PART 82-PARTICULATE USED IN STANDARD
CONTAMINATED REFRIGERANT SAMPLE

1. Particulate Specification

B1.1 The particulate material (pm) will be a blend of 50% coarse air cleaner dust as received, and 50% retained on a 200-mesh screen. The coarse air cleaner dust is available from: AC Spark Plug Division; General Motors Corporation; Flint, Michigan.

B1.2 Preparation of Particulate Materials.

To prepare the blend of contaminant, first wet screen a quantity of coarse air cleaner dust on a 200-mesh screen (particle retention 74 µm). This is done by placing a portion of the dust on a 200-mesh screen and running water through the screen while stirring the dust with the fingers. The fine contaminant particles passing through the screen are discarded. The +200-mesh particles collected on the screen are removed and dried for one hour at 110 °C. The blend of standard contaminant is prepared by mixing 50% by weight of coarse air cleaner dust as received (after drying for one hour at 110 °C) with 50% by weight of the +200 mesh screened dust.

B1.3 Particle Size Analysis.

The coarse air cleaner dust as received and the blend used as the standard contaminant have the following approximate particle size analysis:

Wt. % in various size ranges, µm.

Size range	As received	Blend
0-5	12	6
5-10	12	6
10-20	14	7
20-40	23	11
40-80	30	32
80-200	9	38

[68 FR 43815, July 24, 2003; 68 FR 54678, Sept. 18, 2003]

Pt. 82, Subpt. F, App. C**40 CFR Ch. I (7-1-06 Edition)****APPENDIX C TO SUBPART F OF PART 82—
METHOD FOR TESTING RECOVERY DE-
VICES FOR USE WITH SMALL APPLI-
ANCES***Recovery Efficiency Test Procedure for Refrigerant Recovery Equipment Used on Small Appliances*

The following test procedure is utilized to evaluate the efficiency of equipment designed to recover ozone depleting refrigerants (or any substitute refrigerant subject to the recycling rules promulgated pursuant to section 608 of the Clean Air Act Amendments of 1990) from small appliances when service of those appliances requires entry into the sealed refrigeration system or when those appliances are destined for disposal. This procedure is designed to calculate on a weight or mass basis the percentage of a known charge of CFC-12 refrigerant removed and captured from a test stand refrigeration system. Captured refrigerant is that refrigerant delivered to a container suitable for shipment to a refrigerant reclaimer plus any refrigerant remaining in the recovery system in a manner that it will be transferred to a shipping container after additional recovery operations.

The test stand refrigeration system required for this procedure is constructed with standard equipment utilized in currently produced household refrigerator and freezer products. The procedure also accounts for compressor oils that might be added to or removed from the test stand compressor or any compressor used in the recovery system.

I. TEST STAND

Test stands are constructed in accordance with the following standards.

1. Evaporator— $\frac{3}{16}$ in. outside dia. with 30 cu. in. volume.
2. Condenser— $\frac{1}{4}$ in. outside dia. with 20 cu. in. volume.
3. Suction line capillary heat exchanger—appropriate for compressor used.
4. An 800-950 Btu/hr high side case (rotary) compressor; or (depending on the test scenario);
5. An 800-9500 Btu/hr low side case (reciprocating) compressor.

A person seeking to have its recovery system certified shall specify the compressors by manufacturer and model that are to be used in test stands constructed for evaluation of its equipment, and the type and quantity of compressor to be used in those compressors. Only a compressor oil approved for use by the compressor's manufacturer may be specified, and the quantity of compressor oil specified shall be an appropriate quantity for the type of oil and compressor to be used. In order to reduce the cost of testing, the person seeking certification of its recovery system may supply an EPA approved third

party testing laboratory with test stands meeting these standards for use in evaluating its recovery system.

II. TEST CONDITIONS

Tests are to be conducted at 75 degrees F, plus or minus 2 degrees F (23.9 C \pm 1.1 C). Separate tests are conducted on both high side case compressor stands and low side case compressor stands. Separate tests are also conducted with the test stand compressor running during the recovery operation, and without the test stand compressor running during the recovery operation, to calculate the system's recovery efficiency under either condition.

These tests are to be performed using a representative model of all equipment used in the recovery system to deliver recovered refrigerant to a container suitable for shipment to a refrigerant reclaimer. The test stands are to be equipped with access valves permanently installed as specific by the recovery system's vendor to represent the valves used with that system in actual field operations.

A series of five (5) recovery operations are to be performed for each compressor scenario and a recovery efficiency is calculated based on the total quantity of refrigerant captured during all five (5) recoveries. Alternatively, at the request of the recovery system's vendor, a recovery efficiency is to be calculated for each recovery event. In this case, a statistically significant number of recovery operations are to be performed. Determination of what is a statistically significant number of recoveries is to be calculated as set out below. These individual recovery efficiencies are then averaged.

There are four (4) compressor scenarios to be tested. These are a high side case compressor in working condition; a high side case compressor in nonworking condition; a low side case compressor in working condition; and a low side case compressor in nonworking condition. Recovery efficiencies calculated for the two working compressor scenarios are to be averaged to report a working compressor performance. The two nonworking compressor efficiencies are also to be averaged to report a nonworking compressor performance.

If large scale equipment is required in the system to deliver recovered refrigerant to a refrigerant reclaimer (eg. carbon desorption equipment) and it is not possible to have that equipment evaluated under the procedure, the system's vendor shall obtain engineering data on the performance of that large scale equipment that will reasonably demonstrate the percentage refrigerant lost when processed by that equipment. That data will be supplied to any person required to evaluate the performance of those systems. The following procedure will also be modified as needed to determine the weight

Environmental Protection Agency**Pt. 82, Subpt. F, App. C**

of refrigerant recovered from a test stand and delivered to a container for shipment to the large process equipment for further processing. The percentage loss documented to occur during processing is then to be applied to the recovery efficiencies calculated in this modified procedure to determine the overall capture efficiency for the entire system.

The following are definitions of symbols used in the test procedure.

Test Stand:

“TSO” means an original test stand weight.

“TSC” means a charged test stand weight.

Shipping Containers:

“SCO” means the original or empty weight of shipping container(s).

“SCF” means the final or full weight of shipping container(s).

Recover/Transfer System:

“RSO” means the original weight of a recovery/transfer system.

“RSF” means the final weight of a recovery/transfer system.

“OL” means the net amount of oil added/removed from the recovery device and/or transfer device between the beginning and end of the test for one compressor scenario.

Weighing steps are conducted with precision and accuracy of plus or minus 1.0 gram.

III. TEST PROCEDURE

1. Evacuate the test stand to 20 microns vacuum (pressure measured at a vacuum pump) for 12 hours.

2. Weigh the test stand (TSO).

3. If this is the first recovery operation being performed for a compressor scenario (or if a recovery efficiency is to be calculated for each recovery event), then weigh all devices used in the recovery system to deliver recovered refrigerant to a container suitable for shipment or delivery to a refrigerant reclaiming. Weigh only devices that can retain refrigerant in a manner that it will ultimately be transferred to a shipping container without significant release to the atmosphere (RSO).

4. Weigh final shipping containers (SCO).

5. Charge the test stand with an appropriate CFC-12 charge (either 6 oz. or 9 oz.).

6. Run the test stand for four (4) hours with 100% run time.

7. Turn off the test stand for twelve (12) hours. During this period evaporate all condensation that has collected on the test stand during step 6.

8. Weigh the test stand (TSC).

9. Recover CFC-12 from the test stand and perform all operations needed to transfer the recovered refrigerant to one of the shipping containers weighed in step 4. All recovery and transfer operations are to be performed in accordance with the operating instructions provided by the system's vendor. The compressor in the test stand is to remain “off” or be turned “on” during the recovery operation depending on whether the test is for a nonworking or working compressor performance evaluation. If a recovery efficiency is to be calculated for each recovery event, transfer the captured refrigerant to a shipping container and then skip to step 13. Otherwise continue. If the system allows for multiple recovery operations to be performed before transferring recovered refrigerant to a shipping container, the transfer operation can be delayed until either the maximum number of recovery operations allowed before a transfer is required have been performed, or the last of the five (5) recovery operations has been performed.

10. Perform any oil removal or oil addition operations needed to properly maintain the test stand and the devices used for recovery or transfer operations. Determine the net weight of the oil added or removed from the recovery device and/or transfer device. (OP1 for oil added, OP2 for oil removed).

11. Evacuate the test stand to 20 microns vacuum for 4 hours.

12. Return to step 2 unless five (5) recovery operations have been performed.

13. Weigh all final shipping containers that received recovered refrigerant (SCF).

14. Weigh the equipment weighed in step three (3) above (RSF). If a recovery efficiency is to be calculated for each recovery event, perform calculations and return to step one (1) for additional recoveries.

IV. CALCULATIONS**A. For Five (5) Consecutive Recoveries**

Refrigerant Recoverable equals the summation of charged test stand weights minus original test stand weights.

$$\text{Refrigerant Recoverable} = \sum_{i=1}^5 (TSC_i - TSO_i)$$

Pt. 82, Subpt. F, App. C**40 CFR Ch. I (7-1-06 Edition)**

Oil Loss equals the net weight of oil added to and removed from the recovery device and/or transfer device.

$$OL = \sum_{i=1}^5 (OP1_i - OP2_i)$$

Refrigerant Recovered equals the final weight of shipping containers minus the initial weight of final shipping containers, plus final recovery system weight, minus original

recovery system weight, plus the net value of all additions and removals of oil from the recovery and transfer devices.

$$\text{Refrigerant Recovered} = \left(\sum_{i=1}^n SCF_i - SCO_i \right) + RSF - RSO - OL$$

n=number of shipping containers used.

Recovery Efficiency equals Refrigerant Recovered divided by Refrigerant Recoverable times 100%.

$$\text{Recovery Efficiency} = \frac{\text{Refrigerant Recovered}}{\text{Refrigerant Recoverable}} 100\%$$

B. For Individual Recoveries

Refrigerant Recoverable equals the charged test stand weight minus the original test stand weight.

$$\text{Refrigerant Recoverable} = TSCO - TSO$$

Refrigerant Recovered equals the final weight of the shipping container minus the initial weight of the shipping container plus

the final weight of the recovery system minus the original recovery system weight.

$$\text{Refrigerant Recovered} = SCF - SCO + RSF - RSO$$

Recovery Efficiency equals Refrigerant Recovered divided by Refrigerant Recoverable times 100 percent.

Environmental Protection Agency

Pt. 82, Subpt. F, App. D

$$\text{Recovery Efficiency} = \frac{\text{Refrigerant Recovered}}{\text{Refrigerant Recoverable}} 100\%$$

*C. Calculation of a Statistically Significant
Number of Recoveries*

$$N_{\text{add}} = ((t * sd) / (.10 * X))^2 - N$$

Where:

N_{add} = the number of additional samples required to achieve 90% confidence.

sd = Standard deviation, or $(X/(N-1))^{.5}$

X = Sample average

N = Number of samples tested

Number of samples	t for 90% confidence
2	6.814
3	2.920
4	2.353
5	2.132
6	2.015
7	1.943
8	1.895
9	1.860
10	1.833

Procedure:

1. Compute N_{add} after completing two recoveries.
2. If $N_{\text{add}} > 0$, then run an additional test.
3. Re-compute N_{add} . Continue to test additional samples until $N_{\text{add}} < 0$.

**V. TEST PROCEDURE APPROVAL AND
CERTIFICATION**

Each vendor of capture equipment for small appliances desiring certification will provide a representative model of its capture system and its recommended recovery procedures to an EPA approved third party laboratory for testing in accordance with this procedure. The third party laboratory will certify recovery systems that when tested in accordance with this procedure demonstrate a sufficient recovery efficiency to meet EPA regulatory requirements.

**APPENDIX D TO SUBPART F OF PART 82—
STANDARDS FOR BECOMING A CERTIFYING PROGRAM FOR TECHNICIANS**

Standards for Certifying Programs

a. Test Preparation

Certification for Type II, Type III and Universal technicians will be dependent upon passage of a closed-book, proctored test, administered in a secure environment, by an EPA-approved certifying program.

ministered in a secure environment, by an EPA-approved certifying program.

Certification for Type I technicians will be dependent upon passage of an EPA-approved test, provided by an EPA-approved certifying program. Organizations providing Type I certification only, may choose either an on-site format, or a mail-in format, similar to what is permitted under the MVACs program.

Each certifying program must assemble tests by choosing a prescribed subset from the EPA test bank. EPA expects to have a test bank with a minimum of 500 questions, which will enable the certifying program to generate multiple tests in order to discourage cheating. Each test must include 25 questions drawn from Group 1 and 25 questions drawn from each relevant technical Group. Tests for Universal technicians will include 100 questions (25 from Group 1 and 25 from each relevant technical Group). Each 50-question test represents 10 percent of the total test bank. Questions should be divided in order to sufficiently cover each topic within the Group.

Each certifying program must show a method of randomly choosing which questions will be on the tests. Multiple versions of the test must be used during each testing event. Test answer sheets or (for those testing via the computer medium) computer files must include the name and address of the applicant, the name and address of the certifying program, and the date and location at which the test was administered.

Training material accompanying mail-in Type I tests must not include sample test questions mimicking the language of the certification test. All mail-in material will be subject to review by EPA.

Certifying programs may charge individuals reasonable fees for the administration of the tests. EPA will publish a list of all approved certifying programs periodically, including the fees charged by the programs. This information will be available from the Stratospheric Ozone Protection Hotline.

b. Proctoring

A certifying program for Type II, Type III and Universal technicians must designate or

Pt. 82, Subpt. F, App. D**40 CFR Ch. I (7-1-06 Edition)**

arrange for the designation of at least one proctor registered for each testing event. If more than 50 people are taking tests at the same time at a given site, the certifying organization must adhere to normal testing procedures, by designating at least one additional proctor or monitor for every 50 people taking tests at that site.

The certification test for Type II, Type III and Universal technicians is a closed-book exam. The proctors must ensure that the applicants for certification do not use any notes or training materials during testing. Desks or work space must be placed in a way that discourages cheating. The space and physical facilities are to be conducive to continuous surveillance by the proctors and monitors during testing.

The proctor may not receive any benefit from the outcome of the testing other than a fee for proctoring. Proctors cannot know in advance which questions are on the tests they are proctoring.

Proctors are required to verify the identity of individuals taking the test by examining photo identification. Acceptable forms of identification include but are not limited to drivers' licenses, government identification cards, passports, and military identification.

Certifying programs for Type I technicians using the mail-in format, must take sufficient measures at the test site to ensure that tests are completed honestly by each technician. Each test for Type I certification must provide a means of verifying the identification of the individual taking the test. Acceptable forms of identification include but are not limited to drivers' licenses numbers, social security numbers, and passport numbers.

c. Test Security

A certifying program must demonstrate the ability to ensure the confidentiality and security of the test questions and answer keys through strict accountability procedures. An organization interested in developing a technician certification program will be required to describe these test security procedures to EPA.

After the completion of a test, proctors must collect all test forms, answer sheets, scratch paper and notes. These items are to be placed in a sealed envelope.

d. Test Content

All technician certification tests will include 25 questions from Group I. Group I will ask questions in the following areas:

I. Environmental impact of CFCs and HCFCs

II. Laws and regulations

III. Changing industry outlook

Type I, Type II and Type III certification tests will include 25 questions from Group II.

Group II will ask questions covering sector-specific issues in the following areas:

IV. Leak detection

V. Recovery Techniques

VI. Safety

VII. Shipping

VII. Disposal

Universal Certification will include 75 questions from Group II, with 25 from each of the three sector-specific areas.

e. Grading

Tests must be graded objectively. Certifying programs must inform the applicant of their test results no later than 30 days from the date of the test. Type I certifying programs using the mail-in format, must notify the applicants of their test results no later than 30 days from the date the certifying programs received the completed test and any required documentation. Certifying programs may mail or hand deliver the results.

The passing score for the closed-book Type I, Type II, Type III and Universal certification test is 70 percent. For Type I certification tests using the mail-in format, passing score is 84 percent.

f. Proof of Certification

Certifying programs must issue a standard wallet-sized identification card no later than 30 days from the date of the test. Type I certifying programs using mail-in formats must issue cards to certified technicians no later than 30 days from the date the certifying program receives the completed test and any required documentation.

Each wallet-sized identification card must include, at a minimum, the name of the certifying program including the date the certifying program received EPA approval, the name of the person certified, the type of certification, a unique number for the certified person and the following text:

[name of person] has been certified as [Type I, Type II, Type III and/or Universal—as appropriate] technician as required by 40 CFR part 82, subpart F.

g. Recordkeeping and Reporting Requirements

1. Certifying programs must maintain records that include, but are not limited to, the names and addresses of all individuals taking the tests, the scores of all certification tests administered, and the dates and locations of all testing administered.

2. EPA must receive an activity report from all approved certifying programs by every January 30 and June 30, the first to be submitted following the first full six-month period for which the program has been approved by EPA. This report will include the pass/fail rate and testing schedules. This will allow the Agency to determine the relative progress and success of these programs. If

Environmental Protection Agency**§ 82.170**

the certifying program believes a test bank question needs to be modified, information about that question should also be included.

3. Approved certifying programs will receive a letter of approval from EPA. Each testing center must display a copy of that letter at their place of business.

4. Approved technician certification programs that voluntarily plan to stop providing the certification test must forward all records required by this appendix, §§82.161, and 82.166 to another program currently approved by EPA in accordance with this appendix and with §82.161. Approved technician certification programs that receive records of certified technicians from a program that no longer offers the certification test must inform EPA in writing at the address listed in §82.160 within 30 days of receiving these records. The notification notice must include the name and address of the program to which the records have been transferred. If another currently approved program willing to accept the records cannot be located, these records must be submitted to EPA at the address listed at §82.160.

5. Technician certification programs that have had their certification revoked in accordance with §82.169 must forward all records required by this appendix, §§82.161, and 82.166 to EPA at the address listed in §82.160.

h. Additional Requirements

EPA will periodically inspect testing sites to ensure compliance with EPA regulations. If testing center discrepancies are found, they must be corrected within a specified time period. If discrepancies are not corrected, EPA may suspend or revoke the certifying programs's approval. The inspections will include but are not limited to a review of the certifying programs' provisions for test security, the availability of space and facilities to conduct the administrative requirements and ensure the security of the tests, the availability of adequate testing facilities and spacing of the applicants during testing, a review of the proper procedures regarding accountability, and that there is no evidence of misconduct on the part of the certifying programs, their representatives and proctors, or the applicants for certification.

If the certifying programs offer training or provide review materials to the applicants, these endeavors are to be considered completely separate from the administration of the certification test.

i. Approval Process

EPA anticipates receiving a large number of applications from organizations seeking to become certifying programs. In order to certify as many technicians as possible in a reasonable amount of time, EPA will give

priority to national programs. Below are the guidelines EPA will use:

First: Certifying programs providing at least 25 testing centers with a minimum of one site in at least 8 different states will be considered.

Second: Certifying programs forming regional networks with a minimum of 10 testing centers will be considered.

Third: Certifying programs providing testing centers in geographically isolated areas not sufficiently covered by the national or regional programs will be considered.

Fourth: All other programs applying for EPA approval will be considered.

Sample application forms may be obtained by contacting the Stratospheric Ozone Hotline at 1-800-296-1996.

j. Grandfathering

EPA will grandfather technicians who successfully completed voluntary programs whose operators seek and receive EPA approval to grandfather these technicians, in accordance with §82.161(g). As part of this process, these certifying programs may be required to send EPA-approved supplementary information to ensure the level of the technicians' knowledge. Technicians will be required to read this supplementary information as a condition of certification. The certifying programs will also issue new identification cards meeting the requirements specified above.

k. Sample Application

EPA has provided a sample application. The Agency designed the application to demonstrate the information certifying programs must provide to EPA. Programs are not required to use this form or this format.

[58 FR 28712, May 14, 1993, as amended at 59 FR 42960, 42962, Aug. 19, 1994; 59 FR 55927, Nov. 9, 1994; 68 FR 54678, Sept. 18, 2003]

Subpart G—Significant New Alternatives Policy Program

SOURCE: 59 FR 13147, Mar. 18, 1994, unless otherwise noted.

§ 82.170 Purpose and scope.

(a) The purpose of these regulations in this subpart is to implement section 612 of the Clean Air Act, as amended, regarding the safe alternatives policy on the acceptability of substitutes for ozone-depleting compounds. This program will henceforth be referred to as the "Significant New Alternatives Policy" (SNAP) program. The objectives

§ 82.150

this subpart, except as described in § 82.112.

(5) In the case of any substance designated as a class I or class II substance after February 11, 1993, the prohibitions in paragraphs (a)(1)(i), (a)(2)(i), and (a)(3)(i) of this section shall be applicable one year after the designation of such substance as a class I or class II substance unless otherwise specified in the designation.

Subpart F—Recycling and Emissions Reduction

SOURCE: 58 FR 28712, May 14, 1993, unless otherwise noted.

§ 82.150 Purpose and scope.

(a) The purpose of this subpart is to reduce emissions of class I and class II refrigerants and their substitutes to the lowest achievable level by maximizing the recapture and recycling of such refrigerants during the service, maintenance, repair, and disposal of appliances and restricting the sale of refrigerants consisting in whole or in part of a class I and class II ODS in accordance with Title VI of the Clean Air Act.

(b) This subpart applies to any person servicing, maintaining, or repairing appliances. This subpart also applies to persons disposing of appliances, including small appliances and motor vehicle air conditioners. In addition, this subpart applies to refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recycling and recovery equipment, approved recycling and recovery equipment testing organizations, persons selling class I or class II refrigerants or offering class I or class II refrigerants for sale, and persons purchasing class I or class II refrigerants.

[69 FR 11978, Mar. 12, 2004]

§ 82.152 Definitions.

Appliance means any device which contains and uses a refrigerant and which is used for household or commercial purposes, including any air conditioner, refrigerator, chiller, or freezer.

Apprentice means any person who is currently registered as an apprentice

40 CFR Ch. I (7–1–06 Edition)

in service, maintenance, repair, or disposal of appliances with the U.S. Department of Labor's Bureau of Apprenticeship and Training (or a State Apprenticeship Council recognized by the Bureau of Apprenticeship and Training). If more than two years have elapsed since the person first registered as an apprentice with the Bureau of Apprenticeship and Training (or a State Apprenticeship Council recognized by the Bureau of Apprenticeship and Training), the person shall not be considered an apprentice.

Approved equipment testing organization means any organization which has applied for and received approval from the Administrator pursuant to § 82.160.

Certified refrigerant recovery or recycling equipment means equipment manufactured before November 15, 1993, that meets the standards in § 82.158(c), (e), or (g); equipment certified by an approved equipment testing organization to meet the standards in § 82.158(b), (d), or (f); or equipment certified pursuant to § 82.36(a).

Commercial refrigeration means, for the purposes of § 82.156(i), the refrigeration appliances utilized in the retail food and cold storage warehouse sectors. Retail food includes the refrigeration equipment found in supermarkets, convenience stores, restaurants and other food service establishments. Cold storage includes the equipment used to store meat, produce, dairy products, and other perishable goods. All of the equipment contains large refrigerant charges, typically over 75 pounds.

Critical component means, for the purposes of § 82.156(i), a component without which industrial process refrigeration equipment will not function, will be unsafe in its intended environment, and/or will be subject to failures that would cause the industrial process served by the refrigeration appliance to be unsafe.

Custom-built means, for the purposes of § 82.156(i), that the equipment or any of its critical components cannot be purchased and/or installed without being uniquely designed, fabricated and/or assembled to satisfy a specific set of industrial process conditions.

Disposal means the process leading to and including:

§ 82.158**40 CFR Ch. I (7–1–06 Edition)**

process is quoted, or where the appliance is located in an area subject to radiological contamination and creating a safe working environment will require more than 30 weeks;

(B) The operator notifies EPA within six months of the expiration of the 30-day period following the discovery of an exceedance of the applicable allowable annual leak rate to identify the operator, describe the appliance involved, explain why more than one year is needed, and demonstrate that the first criterion is met in accordance with § 82.166(o); and

(C) The operator maintains records adequate to allow a determination that the criteria are met.

(ii) The owners or operators of federally-owned commercial or comfort-cooling appliances may request additional time to complete retrofitting, replacement or retiring such appliances beyond the additional one-year period if needed and where the initial additional one year was granted in accordance with paragraph (i)(8)(i) of this section. The request shall be submitted to EPA before the end of the ninth month of the first additional year and shall include revisions of information earlier submitted as required under § 82.166(o). Unless EPA objects to this request submitted in accordance with § 82.166(o) within 30 days of receipt, it shall be deemed approved.

(9) Owners or operators must repair leaks pursuant to paragraphs (i)(1), (i)(2) and (i)(5) of this section within 30 days after discovery, or within 30 days after when the leaks should have been discovered if the owners intentionally shielded themselves from information which would have revealed a leak, unless granted additional time pursuant to § 82.156(i).

(10) The amount of time for owners and operators to complete repairs, retrofit plans or retrofits/replacements/retirements under paragraphs (i)(1), (i)(2), (i)(5), (i)(6), (i)(7), (i)(8), and (i)(9) of this section is temporarily suspended at the time an appliance is mothballed as defined in § 82.152. The time for owners and operators to complete repairs, retrofit plans, or retrofits/replacements will resume on the day the appliance is brought back online and is no longer considered

mothballed. All initial and follow-up verification tests must be performed in accordance with paragraphs (i)(3), (i)(3)(i), and (i)(3)(ii) of this section.

(11) In calculating annual leak rates, purged refrigerant that is destroyed at a verifiable destruction efficiency of 98 percent or greater will not be counted toward the leak rate. Owners or operators destroying purged refrigerants must maintain information as set forth in § 82.166(p)(1) and submit to EPA, within 60 days after the first time such exclusion is used by that facility, information set forth in § 82.166(p)(2).

[58 FR 28712, May 14, 1993, as amended at 59 FR 42956, 42962, Aug. 19, 1994; 59 FR 55926, Nov. 9, 1994; 60 FR 40440, Aug. 8, 1995; 68 FR 43807, July 24, 2003; 69 FR 11979, Mar. 12, 2004; 70 FR 1991, Jan. 11, 2005]

§ 82.158 Standards for recycling and recovery equipment.

(a) Effective September 22, 2003, all manufacturers and importers of recycling and recovery equipment intended for use during the maintenance, service, or repair of appliances except MVACs and MVAC-like appliances or during the disposal of appliances except small appliances, MVACs, and MVAC-like appliances, shall have had such equipment certified by an approved equipment testing organization to meet the applicable requirements in paragraph (b)(1), (b)(2), or (d) of this section. All manufacturers and importers of recycling and recovery equipment intended for use during the maintenance, service, or repair of MVAC-like appliances shall have had such equipment certified pursuant to § 82.36(a).

(b) Equipment manufactured or imported on or after November 15, 1993 and before September 22, 2003, for use during the maintenance, service, or repair of appliances except small appliances, MVACs, and MVAC-like appliances or during the disposal of appliances except small appliances, MVACs, and MVAC-like appliances must be certified by an approved equipment testing organization to meet the requirements of paragraph (b)(1) of this section and the following requirements below. Equipment manufactured or imported on or after September 22, 2003,

Environmental Protection Agency**§ 82.158**

for use during the maintenance, service, or repair of appliances except small appliances, MVACs, and MVAC-like appliances or during the disposal of appliances except small appliances, MVACs, and MVAC-like appliances must be certified by an approved equipment testing organization to meet the requirements of paragraph (b)(2) of this section and the following requirements.

(1) In order to be certified, the equipment must be capable of achieving the level of evacuation specified in Table 2 of this section under the conditions of appendix B1 of this subpart (based upon the ARI Standard 740-1993, Performance of Refrigerant Recovery, Recycling and/or Reclaim Equipment):

TABLE 2—LEVELS OF EVACUATION WHICH MUST BE ACHIEVED BY RECOVERY OR RECYCLING EQUIPMENT INTENDED FOR USE WITH APPLIANCES¹

[Manufactured on or after November 15, 1993]

Type of appliance with which recovery or recycling machine is intended to be used	Inches of Hg vacuum
HCFC-22 appliances, or isolated component of such appliances, normally containing less than 200 pounds of refrigerant	0
HCFC-22 appliances, or isolated component of such appliances, normally containing 200 pounds or more of refrigerant	10
Very high-pressure appliances	0
Other high-pressure appliances, or isolated component of such appliances, normally containing less than 200 pounds of refrigerant	10
Other high-pressure appliances, or isolated component of such appliances, normally containing 200 pounds or more of refrigerant	15
Low-pressure appliances	25

¹Except for small appliances, MVACs, and MVAC-like appliances.

²mm Hg absolute.

The vacuums specified in inches of Hg vacuum must be achieved relative to an atmospheric pressure of 29.9 inches of Hg absolute.

(2) In order to be certified, the equipment must be capable of achieving the level of evacuation specified in Table 2 of paragraph (b)(1) of this section under the conditions of appendix B2 of this subpart (based upon the ARI Standard 740-1995, Performance of Refrigerant Recovery, Recycling and/or Reclaim Equipment).

(3) Recovery or recycling equipment whose recovery efficiency cannot be tested according to the procedures in appendix B1 or B2 of this subpart as ap-

plicable may be certified if an approved third-party testing organization adopts and performs a test that demonstrates, to the satisfaction of the Administrator, that the recovery efficiency of that equipment is equal to or better than that of equipment that:

(i) Is intended for use with the same type of appliance; and

(ii) Achieves the level of evacuation in Table 2. The manufacturer's instructions must specify how to achieve the required recovery efficiency, and the equipment must be tested when used according to these instructions.

(4) The equipment must meet the minimum requirements for certification under appendix B1 or B2 of this subpart as applicable.

(5) If the equipment is equipped with a noncondensables purge device, the equipment must not release more than three (3) percent of the quantity of refrigerant being recycled through noncondensables purging under the conditions of appendix B1 and B2 of this subpart as applicable.

(6) The equipment must be equipped with low-loss fittings on all hoses.

(7) The equipment must have its liquid recovery rate and its vapor recovery rate measured under the conditions of appendix B1 or B2 as applicable, unless the equipment has no inherent liquid or vapor recovery rate.

(c) Equipment manufactured or imported before November 15, 1993 for use during the maintenance, service, or repair of appliances except small appliances, MVACs, and MVAC-like appliances or during the disposal of appliances except small appliances, MVACs, and MVAC-like appliances will be considered certified if it is capable of achieving the level of evacuation specified in Table 3 of this section when tested using a properly calibrated pressure gauge:

§ 82.158

40 CFR Ch. I (7–1–06 Edition)

TABLE 3—LEVELS OF EVACUATION WHICH MUST BE ACHIEVED BY RECOVERY OR RECYCLING MACHINES INTENDED FOR USE WITH APPLIANCES¹

[Manufactured before November 15, 1993]

Type of air-conditioning or refrigeration equipment with which recovery or recycling machine is intended to be used	Inches of vacuum (relative to standard atmospheric pressure of 29.9 inches Hg)
HCFC-22 equipment, or isolated component of such equipment, normally containing less than 200 pounds of refrigerant	0
HCFC-22 equipment, or isolated component of such equipment, normally containing 200 pounds or more of refrigerant	4
Very high-pressure equipment	0
Other high-pressure equipment, or isolated component of such equipment, normally containing less than 200 pounds of refrigerant	4
Other high-pressure equipment, or isolated component of such equipment, normally containing 200 pounds or more of refrigerant	4
Low-pressure equipment	25

¹ Except for small appliances, MVACs, and MVAC-like appliances.

(d) Equipment manufactured or imported on or after November 15, 1993 and before September 22, 2003, for use during the maintenance, service, or repair of small appliances must be certified by an approved equipment testing organization to be capable of achieving the requirements described in either paragraph (d)(1) or (d)(2) of this section. Equipment manufactured or imported on or after September 22, 2003, for use during the maintenance, service, or repair of small appliances must be certified by an approved equipment testing organization to be capable of either paragraph (d)(1) or (d)(3) of this section:

(1) Recovering 90% of the refrigerant in the test stand when the compressor of the test stand is operating and 80% of the refrigerant when the compressor of the test stand is not operating when used in accordance with the manufacturer's instructions under the conditions of appendix C, Method for Testing Recovery Devices for Use with Small Appliances; or

(2) Achieving a four-inch vacuum under the conditions of appendix B1 of this subpart, based upon ARI Standard 740–1993; or

(3) Achieving a four-inch vacuum under the conditions of appendix B2 of

this subpart, based upon ARI Standard 740–1995.

(e) Equipment manufactured or imported before November 15, 1993 for use with small appliances will be considered certified if it is capable of either:

(1) Recovering 80% of the refrigerant in the system, whether or not the compressor of the test stand is operating, when used in accordance with the manufacturer's instructions under the conditions of appendix C, Method for Testing Recovery Devices for Use with Small Appliances; or

(2) Achieving a four-inch vacuum when tested using a properly calibrated pressure gauge.

(f) Equipment manufactured or imported on or after November 15, 1993 for use during the maintenance, service, or repair of MVAC-like appliances must be certified in accordance with § 82.36(a).

(g) Equipment manufactured or imported before November 15, 1993 for use during the maintenance, service, or repair of MVAC-like appliances must be capable of reducing the system pressure to 102 mm of mercury vacuum under the conditions of the SAE Standard, SAE J1990 (appendix A to 40 CFR part 82, subpart B).

(h) Manufacturers and importers of equipment certified under paragraphs (b) and (d) of this section must place a label on each piece of equipment stating the following:

THIS EQUIPMENT HAS BEEN CERTIFIED BY [APPROVED EQUIPMENT TESTING ORGANIZATION] TO MEET EPA'S MINIMUM REQUIREMENTS FOR RECYCLING OR RECOVERY EQUIPMENT INTENDED FOR USE WITH [APPROPRIATE CATEGORY OF APPLIANCE].

The label shall also show the date of manufacture and the serial number (if applicable) of the equipment. The label shall be affixed in a readily visible or accessible location, be made of a material expected to last the lifetime of the equipment, present required information in a manner so that it is likely to remain legible for the lifetime of the equipment, and be affixed in such a manner that it cannot be removed from the equipment without damage to the label.

(i) The Administrator will maintain a list of equipment certified pursuant to

Environmental Protection Agency**§ 82.160**

paragraphs (b), (d), and (f) of this section by manufacturer and model. Persons interested in obtaining a copy of the list should send written inquiries to the address in § 82.160(a).

(j) Manufacturers or importers of recycling or recovery equipment intended for use during the maintenance, service, or repair of appliances except MVACs or MVAC-like appliances or during the disposal of appliances except small appliances, MVACs, and MVAC-like appliances must periodically have approved equipment testing organizations conduct either:

(1) Retests of certified recycling or recovery equipment in accordance with paragraph (a) of this section or

(2) Inspections of recycling or recovery equipment at manufacturing facilities to ensure that each equipment model line that has been certified under this section continues to meet the certification criteria.

Such retests or inspections must be conducted at least once every three years after the equipment is first certified.

(k) An equipment model line that has been certified under this section may have its certification revoked if it is subsequently determined to fail to meet the certification criteria. In such cases, the Administrator or her or his designated representative shall give notice to the manufacturer or importer setting forth the basis for her or his determination.

(l) Equipment used to evacuate refrigerant from MVACs and MVAC-like appliances before they are disposed of must be capable of reducing the system pressure to 102 mm of mercury vacuum under the conditions of the SAE Standard, SAE J1990 (appendix A to 40 CFR part 82, subpart B).

(m) Equipment used to evacuate refrigerant from small appliances before they are disposed of must be capable of either:

(1) Removing 90% of the refrigerant when the compressor of the small appliance is operating and 80% of the refrigerant when the compressor of the small appliance is not operating, when used in accordance with the manufacturer's instructions under the conditions of appendix C, Method for Testing Recovery Devices for Use With Small Appliances; or

(2) Evacuating the small appliance to four inches of vacuum when tested using a properly calibrated pressure gauge.

(n) Effective October 22, 2003, equipment that is advertised or marketed as "recycling equipment" must be capable of recycling the standard contaminated refrigerant sample of appendix B2 of this subpart (based upon ARI Standard 740-1995), section 5, to the levels in the following table when tested under the conditions of appendix B2 of this subpart:

MAXIMUM LEVELS OF CONTAMINANTS PERMISSIBLE IN REFRIGERANT PROCESSED THROUGH EQUIPMENT ADVERTISED AS "RECYCLING" EQUIPMENT

Contaminants	Low-pressure (R-11, R-123, R-113) systems	R-12 systems	All other systems
Acid Content (by wt.)	1.0 PPM	1.0 PPM	1.0 PPM.
Moisture (by wt.)	20 PPM	10 PPM	20 PPM.
Noncondensable Gas (by vol.)	N/A	2.0%	2.0%.
High Boiling Residues (by vol.)	1.0%	0.02%	0.02%.
Chlorides by Silver Nitrate Test	No turbidity	No turbidity	No turbidity.
Particulates	Visually clean	Visually clean	Visually clean.

[58 FR 28712, May 14, 1993, as amended at 59 FR 42957, Aug. 19, 1994; 68 FR 43807, July 24, 2003]

§ 82.160 Approved equipment testing organizations.

(a) Any equipment testing organization may apply for approval by the Administrator to certify equipment pursuant to the standards in § 82.158 and

appendices B2 or C of this subpart. The application shall be mailed to: Section 608 Recycling Program Manager; Global Programs Division; Mail Code: 6205J;

§ 112.3

but not limited to oils and fats derived from plant seeds, nuts, fruits, and kernels.

Vessel means every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water, other than a public vessel.

Wetlands means those areas that are inundated or saturated by surface or groundwater at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include playa lakes, swamps, marshes, bogs, and similar areas such as sloughs, prairie potholes, wet meadows, prairie river overflows, mudflats, and natural ponds.

Worst case discharge for an onshore non-transportation-related facility means the largest foreseeable discharge in adverse weather conditions as determined using the worksheets in Appendix D to this part.

§ 112.3 Requirement to prepare and implement a Spill Prevention, Control, and Countermeasure Plan.

The owner or operator of an onshore or offshore facility subject to this section must prepare a Spill Prevention, Control, and Countermeasure Plan (hereafter “SPCC Plan” or “Plan”), in writing, and in accordance with § 112.7, and any other applicable section of this part.

(a) If your onshore or offshore facility was in operation on or before August 16, 2002, you must maintain your Plan, but must amend it, if necessary to ensure compliance with this part, by October 31, 2007, and implement the Plan no later than October 31, 2007. If your onshore or offshore facility becomes operational after August 16, 2002, through October 31, 2007, and could reasonably be expected to have a discharge as described in § 112.1(b), you must prepare and implement a Plan on or before October 31, 2007.

(b) If you are the owner or operator of an onshore or offshore facility that becomes operational after October 31, 2007, and could reasonably be expected to have a discharge as described in § 112.1(b), you must prepare and imple-

40 CFR Ch. I (7–1–06 Edition)

ment a Plan before you begin operations.

(c) If you are the owner or operator of an onshore or offshore mobile facility, such as an onshore drilling or workover rig, barge mounted offshore drilling or workover rig, or portable fueling facility, you must prepare, implement, and maintain a facility Plan as required by this section. You must maintain your Plan, but must amend and implement it, if necessary to ensure compliance with this part, on or before October 31, 2007. If your onshore or offshore mobile facility becomes operational after October 31, 2007, and could reasonably be expected to have a discharge as described in § 112.1(b), you must prepare and implement a Plan before you begin operations. This provision does not require that you prepare a new Plan each time you move the facility to a new site. The Plan may be a general Plan. When you move the mobile or portable facility, you must locate and install it using the discharge prevention practices outlined in the Plan for the facility. The Plan is applicable only while the facility is in a fixed (non-transportation) operating mode.

(d) A licensed Professional Engineer must review and certify a Plan for it to be effective to satisfy the requirements of this part.

(1) By means of this certification the Professional Engineer attests:

(i) That he is familiar with the requirements of this part ;

(ii) That he or his agent has visited and examined the facility;

(iii) That the Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of this part;

(iv) That procedures for required inspections and testing have been established; and

(v) That the Plan is adequate for the facility.

(2) Such certification shall in no way relieve the owner or operator of a facility of his duty to prepare and fully implement such Plan in accordance with the requirements of this part.

(e) If you are the owner or operator of a facility for which a Plan is required under this section, you must:

Environmental Protection Agency**§ 112.4**

(1) Maintain a complete copy of the Plan at the facility if the facility is normally attended at least four hours per day, or at the nearest field office if the facility is not so attended, and

(2) Have the Plan available to the Regional Administrator for on-site review during normal working hours.

(f) *Extension of time.* (1) The Regional Administrator may authorize an extension of time for the preparation and full implementation of a Plan, or any amendment thereto, beyond the time permitted for the preparation, implementation, or amendment of a Plan under this part, when he finds that the owner or operator of a facility subject to this section, cannot fully comply with the requirements as a result of either nonavailability of qualified personnel, or delays in construction or equipment delivery beyond the control and without the fault of such owner or operator or his agents or employees.

(2) If you are an owner or operator seeking an extension of time under paragraph (f)(1) of this section, you may submit a written extension request to the Regional Administrator. Your request must include:

(i) A full explanation of the cause for any such delay and the specific aspects of the Plan affected by the delay;

(ii) A full discussion of actions being taken or contemplated to minimize or mitigate such delay; and

(iii) A proposed time schedule for the implementation of any corrective actions being taken or contemplated, including interim dates for completion of tests or studies, installation and operation of any necessary equipment, or other preventive measures. In addition you may present additional oral or written statements in support of your extension request.

(3) The submission of a written extension request under paragraph (f)(2) of this section does not relieve you of your obligation to comply with the requirements of this part. The Regional Administrator may request a copy of your Plan to evaluate the extension request. When the Regional Administrator authorizes an extension of time for particular equipment or other specific aspects of the Plan, such extension does not affect your obligation to comply with the requirements related

to other equipment or other specific aspects of the Plan for which the Regional Administrator has not expressly authorized an extension.

[67 FR 47140, July 17, 2002, as amended at 68 FR 1351, Jan. 9, 2003; 68 FR 18894, Apr. 17, 2003; 69 FR 48798, Aug. 11, 2004; 71 FR 8466, Feb. 17, 2006]

§ 112.4 Amendment of Spill Prevention, Control, and Countermeasure Plan by Regional Administrator.

If you are the owner or operator of a facility subject to this part, you must:

(a) Notwithstanding compliance with § 112.3, whenever your facility has discharged more than 1,000 U.S. gallons of oil in a single discharge as described in § 112.1(b), or discharged more than 42 U.S. gallons of oil in each of two discharges as described in § 112.1(b), occurring within any twelve month period, submit the following information to the Regional Administrator within 60 days from the time the facility becomes subject to this section:

(1) Name of the facility;

(2) Your name;

(3) Location of the facility;

(4) Maximum storage or handling capacity of the facility and normal daily throughput;

(5) Corrective action and countermeasures you have taken, including a description of equipment repairs and replacements;

(6) An adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary;

(7) The cause of such discharge as described in § 112.1(b), including a failure analysis of the system or subsystem in which the failure occurred;

(8) Additional preventive measures you have taken or contemplated to minimize the possibility of recurrence; and

(9) Such other information as the Regional Administrator may reasonably require pertinent to the Plan or discharge.

(b) Take no action under this section until it applies to your facility. This section does not apply until the expiration of the time permitted for the initial preparation and implementation of the Plan under § 112.3, but not including any amendments to the Plan.

Environmental Protection Agency**§ 112.7**

16, 2002, five years from the date your last review was required under this part. As a result of this review and evaluation, you must amend your SPCC Plan within six months of the review to include more effective prevention and control technology if the technology has been field-proven at the time of the review and will significantly reduce the likelihood of a discharge as described in §112.1(b) from the facility. You must implement any amendment as soon as possible, but not later than six months following preparation of any amendment. You must document your completion of the review and evaluation, and must sign a statement as to whether you will amend the Plan, either at the beginning or end of the Plan or in a log or an appendix to the Plan. The following words will suffice, "I have completed review and evaluation of the SPCC Plan for (name of facility) on (date), and will (will not) amend the Plan as a result."

(c) Have a Professional Engineer certify any technical amendment to your Plan in accordance with §112.3(d).

§ 112.6 [Reserved]**§ 112.7 General requirements for Spill Prevention, Control, and Countermeasure Plans.**

If you are the owner or operator of a facility subject to this part you must prepare a Plan in accordance with good engineering practices. The Plan must have the full approval of management at a level of authority to commit the necessary resources to fully implement the Plan. You must prepare the Plan in writing. If you do not follow the sequence specified in this section for the Plan, you must prepare an equivalent Plan acceptable to the Regional Administrator that meets all of the applicable requirements listed in this part, and you must supplement it with a section cross-referencing the location of requirements listed in this part and the equivalent requirements in the other prevention plan. If the Plan calls for additional facilities or procedures, methods, or equipment not yet fully operational, you must discuss these items in separate paragraphs, and must explain separately the details of installation and operational start-up. As de-

tailed elsewhere in this section, you must also:

(a)(1) Include a discussion of your facility's conformance with the requirements listed in this part.

(2) Comply with all applicable requirements listed in this part. Your Plan may deviate from the requirements in paragraphs (g), (h)(2) and (3), and (i) of this section and the requirements in subparts B and C of this part, except the secondary containment requirements in paragraphs (c) and (h)(1) of this section, and §§112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c), where applicable to a specific facility, if you provide equivalent environmental protection by some other means of spill prevention, control, or countermeasure. Where your Plan does not conform to the applicable requirements in paragraphs (g), (h)(2) and (3), and (i) of this section, or the requirements of subparts B and C of this part, except the secondary containment requirements in paragraphs (c) and (h)(1) of this section, and §§112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c), you must state the reasons for nonconformance in your Plan and describe in detail alternate methods and how you will achieve equivalent environmental protection. If the Regional Administrator determines that the measures described in your Plan do not provide equivalent environmental protection, he may require that you amend your Plan, following the procedures in §112.4(d) and (e).

(3) Describe in your Plan the physical layout of the facility and include a facility diagram, which must mark the location and contents of each container. The facility diagram must include completely buried tanks that are otherwise exempted from the requirements of this part under §112.1(d)(4). The facility diagram must also include all transfer stations and connecting pipes. You must also address in your Plan:

(i) The type of oil in each container and its storage capacity;

§ 112.7**40 CFR Ch. I (7–1–06 Edition)**

(ii) Discharge prevention measures including procedures for routine handling of products (loading, unloading, and facility transfers, etc.);

(iii) Discharge or drainage controls such as secondary containment around containers and other structures, equipment, and procedures for the control of a discharge;

(iv) Countermeasures for discharge discovery, response, and cleanup (both the facility's capability and those that might be required of a contractor);

(v) Methods of disposal of recovered materials in accordance with applicable legal requirements; and

(vi) Contact list and phone numbers for the facility response coordinator, National Response Center, cleanup contractors with whom you have an agreement for response, and all appropriate Federal, State, and local agencies who must be contacted in case of a discharge as described in § 112.1(b).

(4) Unless you have submitted a response plan under § 112.20, provide information and procedures in your Plan to enable a person reporting a discharge as described in § 112.1(b) to relate information on the exact address or location and phone number of the facility; the date and time of the discharge; the type of material discharged; estimates of the total quantity discharged as described in § 112.1(b); the source of the discharge; a description of all affected media; the cause of the discharge; any damages or injuries caused by the discharge; actions being used to stop, remove, and mitigate the effects of the discharge; whether an evacuation may be needed; and, the names of individuals and/or organizations who have also been contacted.

(5) Unless you have submitted a response plan under § 112.20, organize portions of the Plan describing procedures you will use when a discharge occurs in a way that will make them readily usable in an emergency, and include appropriate supporting material as appendices.

(b) Where experience indicates a reasonable potential for equipment failure (such as loading or unloading equipment, tank overflow, rupture, or leakage, or any other equipment known to

be a source of a discharge), include in your Plan a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of each type of major equipment failure.

(c) Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge as described in § 112.1(b). The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from a primary containment system, such as a tank or pipe, will not escape the containment system before cleanup occurs. At a minimum, you must use one of the following prevention systems or its equivalent:

(1) For onshore facilities:

(i) Dikes, berms, or retaining walls sufficiently impervious to contain oil;

(ii) Curbing;

(iii) Culverting, gutters, or other drainage systems;

(iv) Weirs, booms, or other barriers;

(v) Spill diversion ponds;

(vi) Retention ponds; or

(vii) Sorbent materials.

(2) For offshore facilities:

(i) Curbing or drip pans; or

(ii) Sumps and collection systems.

(d) If you determine that the installation of any of the structures or pieces of equipment listed in paragraphs (c) and (h)(1) of this section, and §§ 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c) to prevent a discharge as described in § 112.1(b) from any onshore or offshore facility is not practicable, you must clearly explain in your Plan why such measures are not practicable; for bulk storage containers, conduct both periodic integrity testing of the containers and periodic integrity and leak testing of the valves and piping; and, unless you have submitted a response plan under § 112.20, provide in your Plan the following:

(1) An oil spill contingency plan following the provisions of part 109 of this chapter.

(2) A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

Environmental Protection Agency**§ 112.7**

(e) *Inspections, tests, and records.* Conduct inspections and tests required by this part in accordance with written procedures that you or the certifying engineer develop for the facility. You must keep these written procedures and a record of the inspections and tests, signed by the appropriate supervisor or inspector, with the SPCC Plan for a period of three years. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.

(f) *Personnel, training, and discharge prevention procedures.* (1) At a minimum, train your oil-handling personnel in the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and, the contents of the facility SPCC Plan.

(2) Designate a person at each applicable facility who is accountable for discharge prevention and who reports to facility management.

(3) Schedule and conduct discharge prevention briefings for your oil-handling personnel at least once a year to assure adequate understanding of the SPCC Plan for that facility. Such briefings must highlight and describe known discharges as described in § 112.1(b) or failures, malfunctioning components, and any recently developed precautionary measures.

(g) *Security (excluding oil production facilities).* (1) Fully fence each facility handling, processing, or storing oil, and lock and/or guard entrance gates when the facility is not in production or is unattended.

(2) Ensure that the master flow and drain valves and any other valves permitting direct outward flow of the container's contents to the surface have adequate security measures so that they remain in the closed position when in non-operating or non-standby status.

(3) Lock the starter control on each oil pump in the "off" position and locate it at a site accessible only to authorized personnel when the pump is in a non-operating or non-standby status.

(4) Securely cap or blank-flange the loading/unloading connections of oil pipelines or facility piping when not in

service or when in standby service for an extended time. This security practice also applies to piping that is emptied of liquid content either by draining or by inert gas pressure.

(5) Provide facility lighting commensurate with the type and location of the facility that will assist in the:

(i) Discovery of discharges occurring during hours of darkness, both by operating personnel, if present, and by non-operating personnel (the general public, local police, etc.); and

(ii) Prevention of discharges occurring through acts of vandalism.

(h) *Facility tank car and tank truck loading/unloading rack (excluding off-shore facilities).* (1) Where loading/unloading area drainage does not flow into a catchment basin or treatment facility designed to handle discharges, use a quick drainage system for tank car or tank truck loading and unloading areas. You must design any containment system to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility.

(2) Provide an interlocked warning light or physical barrier system, warning signs, wheel chocks, or vehicle break interlock system in loading/unloading areas to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines.

(3) Prior to filling and departure of any tank car or tank truck, closely inspect for discharges the lowermost drain and all outlets of such vehicles, and if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.

(i) If a field-constructed aboveground container undergoes a repair, alteration, reconstruction, or a change in service that might affect the risk of a discharge or failure due to brittle fracture or other catastrophe, or has discharged oil or failed due to brittle fracture failure or other catastrophe, evaluate the container for risk of discharge or failure due to brittle fracture or other catastrophe, and as necessary, take appropriate action.

(j) In addition to the minimal prevention standards listed under this section, include in your Plan a complete

§ 112.8

discussion of conformance with the applicable requirements and other effective discharge prevention and containment procedures listed in this part or any applicable more stringent State rules, regulations, and guidelines.

Subpart B—Requirements for Petroleum Oils and Non-Petroleum Oils, Except Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and Vegetable Oils (Including Oils from Seeds, Nuts, Fruits, and Kernels)

SOURCE: 67 FR 47146, July 17, 2002, unless otherwise noted.

§ 112.8 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities).

If you are the owner or operator of an onshore facility (excluding a production facility), you must:

(a) Meet the general requirements for the Plan listed under § 112.7, and the specific discharge prevention and containment procedures listed in this section.

(b) *Facility drainage.* (1) Restrain drainage from diked storage areas by valves to prevent a discharge into the drainage system or facility effluent treatment system, except where facility systems are designed to control such discharge. You may empty diked areas by pumps or ejectors; however, you must manually activate these pumps or ejectors and must inspect the condition of the accumulation before starting, to ensure no oil will be discharged.

(2) Use valves of manual, open-and-closed design, for the drainage of diked areas. You may not use flapper-type drain valves to drain diked areas. If your facility drainage drains directly into a watercourse and not into an on-site wastewater treatment plant, you must inspect and may drain uncontaminated retained stormwater, as provided in paragraphs (c)(3)(ii), (iii), and (iv) of this section.

(3) Design facility drainage systems from undiked areas with a potential for a discharge (such as where piping is lo-

40 CFR Ch. I (7–1–06 Edition)

cated outside containment walls or where tank truck discharges may occur outside the loading area) to flow into ponds, lagoons, or catchment basins designed to retain oil or return it to the facility. You must not locate catchment basins in areas subject to periodic flooding.

(4) If facility drainage is not engineered as in paragraph (b)(3) of this section, equip the final discharge of all ditches inside the facility with a diversion system that would, in the event of an uncontrolled discharge, retain oil in the facility.

(5) Where drainage waters are treated in more than one treatment unit and such treatment is continuous, and pump transfer is needed, provide two “lift” pumps and permanently install at least one of the pumps. Whatever techniques you use, you must engineer facility drainage systems to prevent a discharge as described in § 112.1(b) in case there is an equipment failure or human error at the facility.

(c) *Bulk storage containers.* (1) Not use a container for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature.

(2) Construct all bulk storage container installations so that you provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must ensure that diked areas are sufficiently impervious to contain discharged oil. Dikes, containment curbs, and pits are commonly employed for this purpose. You may also use an alternative system consisting of a drainage trench enclosure that must be arranged so that any discharge will terminate and be safely confined in a facility catchment basin or holding pond.

(3) Not allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent into an open watercourse, lake, or pond, bypassing the facility treatment system unless you:

(i) Normally keep the bypass valve sealed closed.

(ii) Inspect the retained rainwater to ensure that its presence will not cause a discharge as described in § 112.1(b).

§ 261.3**40 CFR Ch. I (7–1–06 Edition)**

in subparts C or D of this part, except for brominated material that meets the following criteria:

- (i) The material must contain a bromine concentration of at least 45%; and
- (ii) The material must contain less than a total of 1% of toxic organic compounds listed in appendix VIII; and
- (iii) The material is processed continually on-site in the halogen acid furnace via direct conveyance (hard piping).

(3) The Administrator will use the following criteria to add wastes to that list:

(i)(A) The materials are ordinarily disposed of, burned, or incinerated; or

(B) The materials contain toxic constituents listed in appendix VIII of part 261 and these constituents are not ordinarily found in raw materials or products for which the materials substitute (or are found in raw materials or products in smaller concentrations) and are not used or reused during the recycling process; and

(ii) The material may pose a substantial hazard to human health and the environment when recycled.

(e) *Materials that are not solid waste when recycled.* (1) Materials are not solid wastes when they can be shown to be recycled by being:

(i) Used or reused as ingredients in an industrial process to make a product, provided the materials are not being reclaimed; or

(ii) Used or reused as effective substitutes for commercial products; or

(iii) Returned to the original process from which they are generated, without first being reclaimed or land disposed. The material must be returned as a substitute for feedstock materials. In cases where the original process to which the material is returned is a secondary process, the materials must be managed such that there is no placement on the land. In cases where the materials are generated and reclaimed within the primary mineral processing industry, the conditions of the exclusion found at § 261.4(a)(17) apply rather than this paragraph.

(2) The following materials are solid wastes, even if the recycling involves use, reuse, or return to the original process (described in paragraphs (e)(1) (i) through (iii) of this section):

(i) Materials used in a manner constituting disposal, or used to produce products that are applied to the land; or

(ii) Materials burned for energy recovery, used to produce a fuel, or contained in fuels; or

(iii) Materials accumulated speculatively; or

(iv) Materials listed in paragraphs (d)(1) and (d)(2) of this section.

(f) *Documentation of claims that materials are not solid wastes or are conditionally exempt from regulation.* Respondents in actions to enforce regulations implementing subtitle C of RCRA who raise a claim that a certain material is not a solid waste, or is conditionally exempt from regulation, must demonstrate that there is a known market or disposition for the material, and that they meet the terms of the exclusion or exemption. In doing so, they must provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste, or is exempt from regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials must show that they have the necessary equipment to do so.

[50 FR 664, Jan. 4, 1985, as amended at 50 FR 33542, Aug. 20, 1985; 56 FR 7206, Feb. 21, 1991; 56 FR 32688, July 17, 1991; 56 FR 42512, Aug. 27, 1991; 57 FR 38564, Aug. 25, 1992; 59 FR 48042, Sept. 19, 1994; 62 FR 6651, Feb. 12, 1997; 62 FR 26019, May 12, 1997; 63 FR 28636, May 26, 1998; 64 FR 24513, May 11, 1999; 67 FR 11253, Mar. 13, 2002]

§ 261.3 Definition of hazardous waste.

(a) A solid waste, as defined in § 261.2, is a hazardous waste if:

(1) It is not excluded from regulation as a hazardous waste under § 261.4(b); and

(2) It meets any of the following criteria:

(i) It exhibits any of the characteristics of hazardous waste identified in subpart C of this part. However, any mixture of a waste from the extraction, beneficiation, and processing of ores and minerals excluded under § 261.4(b)(7) and any other solid waste

Environmental Protection Agency**§ 261.3**

exhibiting a characteristic of hazardous waste under subpart C is a hazardous waste only if it exhibits a characteristic that would not have been exhibited by the excluded waste alone if such mixture had not occurred, or if it continues to exhibit any of the characteristics exhibited by the non-excluded wastes prior to mixture. Further, for the purposes of applying the Toxicity Characteristic to such mixtures, the mixture is also a hazardous waste if it exceeds the maximum concentration for any contaminant listed in table I to § 261.24 that would not have been exceeded by the excluded waste alone if the mixture had not occurred or if it continues to exceed the maximum concentration for any contaminant exceeded by the nonexempt waste prior to mixture.

(ii) It is listed in subpart D of this part and has not been excluded from the lists in subpart D of this part under §§ 260.20 and 260.22 of this chapter.

(iii) [Reserved]

(iv) It is a mixture of solid waste and one or more hazardous wastes listed in subpart D of this part and has not been excluded from paragraph (a)(2) of this section under §§ 260.20 and 260.22, paragraph (g) of this section, or paragraph (h) of this section; however, the following mixtures of solid wastes and hazardous wastes listed in subpart D of this part are not hazardous wastes (except by application of paragraph (a)(2)(i) or (ii) of this section) if the generator can demonstrate that the mixture consists of wastewater the discharge of which is subject to regulation under either section 402 or section 307(b) of the Clean Water Act (including wastewater at facilities which have eliminated the discharge of wastewater) and;

(A) One or more of the following spent solvents listed in § 261.31—benzene, carbon tetrachloride, tetrachloroethylene, trichloroethylene or the scrubber waters derived from the combustion of these spent solvents—*Provided*, That the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater

treatment or pretreatment system does not exceed 1 part per million, OR the total measured concentration of these solvents entering the headworks of the facility's wastewater treatment system (at facilities subject to regulation under the Clean Air Act, as amended, at 40 CFR parts 60, 61, or 63, or at facilities subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions), does not exceed 1 part per million on an average weekly basis. Any facility that uses benzene as a solvent and claims this exemption must use an aerated biological wastewater treatment system and must use only lined surface impoundments or tanks prior to secondary clarification in the wastewater treatment system. Facilities that choose to measure concentration levels must file a copy of their sampling and analysis plan with the Regional Administrator, or State Director, as the context requires, or an authorized representative ("Director" as defined in 40 CFR 270.2). A facility must file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan must include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once they receive confirmation that the sampling and analysis plan has been received by the Director. The Director may reject the sampling and analysis plan if he/she finds that, the sampling and analysis plan fails to include the above information; or the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Director rejects the sampling and analysis plan or if the Director finds that the facility is not following the sampling and analysis plan, the Director shall notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected; or

(B) One or more of the following spent solvents listed in § 261.31—methylene chloride, 1,1,1-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene,

§ 261.3

toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents, 2-ethoxyethanol, or the scrubber waters derived from the combustion of these spent solvents—*Provided* That the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 25 parts per million, OR the total measured concentration of these solvents entering the headworks of the facility's wastewater treatment system (at facilities subject to regulation under the Clean Air Act as amended, at 40 CFR parts 60, 61, or 63, or at facilities subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions), does not exceed 25 parts per million on an average weekly basis. Facilities that choose to measure concentration levels must file a copy of their sampling and analysis plan with the Regional Administrator, or State Director, as the context requires, or an authorized representative ("Director" as defined in 40 CFR 270.2). A facility must file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan must include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once they receive confirmation that the sampling and analysis plan has been received by the Director. The Director may reject the sampling and analysis plan if he/she finds that, the sampling and analysis plan fails to include the above information; or the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Director rejects the sampling and analysis plan or if the Director finds that the facility is not following the sampling and analysis plan, the Director shall notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected; or

40 CFR Ch. I (7–1–06 Edition)

(C) One of the following wastes listed in § 261.32, provided that the wastes are discharged to the refinery oil recovery sewer before primary oil/water/solids separation—heat exchanger bundle cleaning sludge from the petroleum refining industry (EPA Hazardous Waste No. K050), crude oil storage tank sediment from petroleum refining operations (EPA Hazardous Waste No. K169), clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations (EPA Hazardous Waste No. K170), spent hydrotreating catalyst (EPA Hazardous Waste No. K171), and spent hydrotreating catalyst (EPA Hazardous Waste No. K172); or

(D) A discarded hazardous waste, commercial chemical product, or chemical intermediate listed in §§ 261.31 through 261.33, arising from *de minimis* losses of these materials. For purposes of this paragraph (a)(2)(iv)(D), *de minimis* losses are inadvertent releases to a wastewater treatment system, including those from normal material handling operations (*e.g.*, spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor leaks of process equipment, storage tanks or containers; leaks from well maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing. Any manufacturing facility that claims an exemption for *de minimis* quantities of wastes listed in §§ 261.31 through 261.32, or any nonmanufacturing facility that claims an exemption for *de minimis* quantities of wastes listed in subpart D of this part must either have eliminated the discharge of wastewaters or have included in its Clean Water Act permit application or submission to its pretreatment control authority the constituents for which each waste was listed (in 40 CFR 261 appendix VII) of this part; and the constituents in the table "Treatment Standards for Hazardous Wastes" in 40 CFR 268.40 for which each waste has a treatment

Environmental Protection Agency**§ 261.3**

standard (*i.e.*, Land Disposal Restriction constituents). A facility is eligible to claim the exemption once the permit writer or control authority has been notified of possible *de minimis* releases via the Clean Water Act permit application or the pretreatment control authority submission. A copy of the Clean Water permit application or the submission to the pretreatment control authority must be placed in the facility's on-site files; or

(E) Wastewater resulting from laboratory operations containing toxic (T) wastes listed in subpart D of this part, Provided, That the annualized average flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of the facility's wastewater treatment or pretreatment system or provided the wastes, combined annualized average concentration does not exceed one part per million in the headworks of the facility's wastewater treatment or pretreatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation; or

(F) One or more of the following wastes listed in § 261.32—wastewaters from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K157)—*Provided* that the maximum weekly usage of formaldehyde, methyl chloride, methylene chloride, and triethylamine (including all amounts that cannot be demonstrated to be reacted in the process, destroyed through treatment, or is recovered, *i.e.*, what is discharged or volatilized) divided by the average weekly flow of process wastewater prior to any dilution into the headworks of the facility's wastewater treatment system does not exceed a total of 5 parts per million by weight OR the total measured concentration of these chemicals entering the headworks of the facility's wastewater treatment system (at facilities subject to regulation under the Clean Air Act as amended, at 40 CFR parts 60, 61, or 63, or at facilities subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions), does not exceed 5 parts per million on an average weekly basis. Facilities that choose to measure concentra-

tion levels must file copy of their sampling and analysis plan with the Regional Administrator, or State Director, as the context requires, or an authorized representative ("Director" as defined in 40 CFR 270.2). A facility must file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan must include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once they receive confirmation that the sampling and analysis plan has been received by the Director. The Director may reject the sampling and analysis plan if he/she finds that, the sampling and analysis plan fails to include the above information; or the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Director rejects the sampling and analysis plan or if the Director finds that the facility is not following the sampling and analysis plan, the Director shall notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected; or

(G) Wastewaters derived from the treatment of one or more of the following wastes listed in § 261.32—organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K156).—*Provided*, that the maximum concentration of formaldehyde, methyl chloride, methylene chloride, and triethylamine prior to any dilutions into the headworks of the facility's wastewater treatment system does not exceed a total of 5 milligrams per liter OR the total measured concentration of these chemicals entering the headworks of the facility's wastewater treatment system (at facilities subject to regulation under the Clean Air Act as amended, at 40 CFR parts 60, 61, or 63, or at facilities subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions), does not exceed 5 milligrams per

§ 261.3

liter on an average weekly basis. Facilities that choose to measure concentration levels must file copy of their sampling and analysis plan with the Regional Administrator, or State Director, as the context requires, or an authorized representative ("Director" as defined in 40 CFR 270.2). A facility must file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan must include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once they receive confirmation that the sampling and analysis plan has been received by the Director. The Director may reject the sampling and analysis plan if he/she finds that, the sampling and analysis plan fails to include the above information; or the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Director rejects the sampling and analysis plan or if the Director finds that the facility is not following the sampling and analysis plan, the Director shall notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected.

(v) *Rebuttable presumption for used oil.* Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in subpart D of part 261 of this chapter. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in appendix VIII of part 261 of this chapter).

(b) A solid waste which is not excluded from regulation under paragraph (a)(1) of this section becomes a hazardous waste when any of the following events occur:

(1) In the case of a waste listed in subpart D of this part, when the waste first meets the listing description set forth in subpart D of this part.

40 CFR Ch. I (7-1-06 Edition)

(2) In the case of a mixture of solid waste and one or more listed hazardous wastes, when a hazardous waste listed in subpart D is first added to the solid waste.

(3) In the case of any other waste (including a waste mixture), when the waste exhibits any of the characteristics identified in subpart C of this part.

(c) Unless and until it meets the criteria of paragraph (d) of this section:

(1) A hazardous waste will remain a hazardous waste.

(2)(i) Except as otherwise provided in paragraph (c)(2)(ii), (g) or (h) of this section, any solid waste generated from the treatment, storage, or disposal of a hazardous waste, including any sludge, spill residue, ash emission control dust, or leachate (but not including precipitation run-off) is a hazardous waste. (However, materials that are reclaimed from solid wastes and that are used beneficially are not solid wastes and hence are not hazardous wastes under this provision unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.)

(ii) The following solid wastes are not hazardous even though they are generated from the treatment, storage, or disposal of a hazardous waste, unless they exhibit one or more of the characteristics of hazardous waste:

(A) Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (SIC Codes 331 and 332).

(B) Waste from burning any of the materials exempted from regulation by § 261.6(a)(3)(iii) and (iv).

(C)(1) Nonwastewater residues, such as slag, resulting from high temperature metals recovery (HTMR) processing of K061, K062 or F006 waste, in units identified as rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth furnace/electric furnace combinations or industrial furnaces (as defined in paragraphs (6), (7), and (13) of the definition for "Industrial furnace" in 40 CFR 260.10), that are disposed in subtitle D units, provided that these residues meet the generic exclusion levels identified in the tables in this paragraph for all constituents, and exhibit no characteristics of hazardous waste.

Environmental Protection Agency**§261.3**

Testing requirements must be incorporated in a facility's waste analysis plan or a generator's self-implementing waste analysis plan; at a minimum, composite samples of residues must be collected and analyzed quarterly and/or when the process or operation generating the waste changes. Persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements.

Constituent	Maximum for any single composite sample—TCLP (mg/l)
Generic exclusion levels for K061 and K062 nonwastewater HTMR residues	
Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70
Generic exclusion levels for F006 nonwastewater HTMR residues	
Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Cyanide (total) (mg/kg)	1.8
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70

(2) A one-time notification and certification must be placed in the facility's files and sent to the EPA region or authorized state for K061, K062 or F006 HTMR residues that meet the generic exclusion levels for all constituents and do not exhibit any characteristics that are sent to subtitle D units. The notification and certification that is placed in the generators or treaters files must be updated if the process or operation generating the waste changes and/or if the subtitle D unit receiving the waste changes. However, the generator or treater need only no-

tify the EPA region or an authorized state on an annual basis if such changes occur. Such notification and certification should be sent to the EPA region or authorized state by the end of the calendar year, but no later than December 31. The notification must include the following information: The name and address of the subtitle D unit receiving the waste shipments; the EPA Hazardous Waste Number(s) and treatability group(s) at the initial point of generation; and, the treatment standards applicable to the waste at the initial point of generation. The certification must be signed by an authorized representative and must state as follows: "I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteristic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

(D) Biological treatment sludge from the treatment of one of the following wastes listed in §261.32—organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K156), and wastewaters from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K157).

(E) Catalyst inert support media separated from one of the following wastes listed in §261.32—Spent hydrotreating catalyst (EPA Hazardous Waste No. K171), and Spent hydrotreating catalyst (EPA Hazardous Waste No. K172).

(d) Any solid waste described in paragraph (c) of this section is not a hazardous waste if it meets the following criteria:

(1) In the case of any solid waste, it does not exhibit any of the characteristics of hazardous waste identified in subpart C of this part. (However, wastes that exhibit a characteristic at the point of generation may still be subject to the requirements of part 268, even if they no longer exhibit a characteristic at the point of land disposal.)

(2) In the case of a waste which is a listed waste under subpart D of this

§ 261.4

part, contains a waste listed under subpart D of this part or is derived from a waste listed in subpart D of this part, it also has been excluded from paragraph (c) of this section under §§ 260.20 and 260.22 of this chapter.

(e) [Reserved]

(f) Notwithstanding paragraphs (a) through (d) of this section and provided the debris as defined in part 268 of this chapter does not exhibit a characteristic identified at subpart C of this part, the following materials are not subject to regulation under 40 CFR parts 260, 261 to 266, 268, or 270:

(1) Hazardous debris as defined in part 268 of this chapter that has been treated using one of the required extraction or destruction technologies specified in Table 1 of § 268.45 of this chapter; persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements; or

(2) Debris as defined in part 268 of this chapter that the Regional Administrator, considering the extent of contamination, has determined is no longer contaminated with hazardous waste.

(g)(1) A hazardous waste that is listed in subpart D of this part solely because it exhibits one or more characteristics of ignitability as defined under § 261.21, corrosivity as defined under § 261.22, or reactivity as defined under § 261.23 is not a hazardous waste, if the waste no longer exhibits any characteristic of hazardous waste identified in subpart C of this part.

(2) The exclusion described in paragraph (g)(1) of this section also pertains to:

(i) Any mixture of a solid waste and a hazardous waste listed in subpart D of this part solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity as regulated under paragraph (a)(2)(iv) of this section; and

(ii) Any solid waste generated from treating, storing, or disposing of a hazardous waste listed in subpart D of this part solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity as regulated

40 CFR Ch. I (7–1–06 Edition)

under paragraph (c)(2)(i) of this section.

(3) Wastes excluded under this section are subject to part 268 of this chapter (as applicable), even if they no longer exhibit a characteristic at the point of land disposal.

(4) Any mixture of a solid waste excluded from regulation under § 261.4(b)(7) and a hazardous waste listed in subpart D of this part solely because it exhibits one or more of the characteristics of ignitability, corrosivity, or reactivity as regulated under paragraph (a)(2)(iv) of this section is not a hazardous waste, if the mixture no longer exhibits any characteristic of hazardous waste identified in subpart C of this part for which the hazardous waste listed in subpart D of this part was listed.

(h)(1) Hazardous waste containing radioactive waste is no longer a hazardous waste when it meets the eligibility criteria and conditions of 40 CFR part 266, Subpart N ('eligible radioactive mixed waste').

(2) The exemption described in paragraph (h)(1) of this section also pertains to:

(i) Any mixture of a solid waste and an eligible radioactive mixed waste; and

(ii) Any solid waste generated from treating, storing, or disposing of an eligible radioactive mixed waste.

(3) Waste exempted under this section must meet the eligibility criteria and specified conditions in 40 CFR 266.225 and 40 CFR 266.230 (for storage and treatment) and in 40 CFR 266.310 and 40 CFR 266.315 (for transportation and disposal). Waste that fails to satisfy these eligibility criteria and conditions is regulated as hazardous waste.

[57 FR 7632, Mar. 3, 1992; 57 FR 23063, June 1, 1992, as amended at 57 FR 37263, Aug. 18, 1992; 57 FR 41611, Sept. 10, 1992; 57 FR 49279, Oct. 30, 1992; 59 FR 38545, July 28, 1994; 60 FR 7848, Feb. 9, 1995; 63 FR 28637, May 26, 1998; 63 FR 42184, Aug. 6, 1998; 66 FR 27297, May 16, 2001; 66 FR 50333, Oct. 3, 2001; 70 FR 34561, June 14, 2005; 70 FR 57784, Oct. 4, 2005]

§ 261.4 Exclusions.

(a) *Materials which are not solid wastes.* The following materials are not solid wastes for the purpose of this part:

Environmental Protection Agency**§ 262.34****§ 262.32 Marking.**

(a) Before transporting or offering hazardous waste for transportation off-site, a generator must mark each package of hazardous waste in accordance with the applicable Department of Transportation regulations on hazardous materials under 49 CFR part 172;

(b) Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must mark each container of 119 gallons or less used in such transportation with the following words and information in accordance with the requirements of 49 CFR 172.304:

HAZARDOUS WASTE—Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.

Generator's Name and Address _____
Generator's EPA Identification Number _____

Manifest Tracking Number _____

[45 FR 33142, May 19, 1980, as amended at 70 FR 10817, Mar. 4, 2005]

§ 262.33 Placarding.

Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must placard or offer the initial transporter the appropriate placards according to Department of Transportation regulations for hazardous materials under 49 CFR part 172, subpart F.

[70 FR 35037, June 16, 2005]

§ 262.34 Accumulation time.

(a) Except as provided in paragraphs (d), (e), and (f) of this section, a generator may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status, provided that:

(1) The waste is placed:

(i) In containers and the generator complies with the applicable requirements of subparts I, AA, BB, and CC of 40 CFR part 265; and/or

(ii) In tanks and the generator complies with the applicable requirements of subparts J, AA, BB, and CC of 40 CFR part 265 except §§ 265.197(c) and 265.200; and/or

(iii) On drip pads and the generator complies with subpart W of 40 CFR part

265 and maintains the following records at the facility:

(A) A description of procedures that will be followed to ensure that all wastes are removed from the drip pad and associated collection system at least once every 90 days; and

(B) Documentation of each waste removal, including the quantity of waste removed from the drip pad and the sump or collection system and the date and time of removal; and/or

(iv) The waste is placed in containment buildings and the generator complies with subpart DD of 40 CFR part 265, has placed its professional engineer certification that the building complies with the design standards specified in 40 CFR 265.1101 in the facility's operating record no later than 60 days after the date of initial operation of the unit. After February 18, 1993, PE certification will be required prior to operation of the unit. The owner or operator shall maintain the following records at the facility:

(A) A written description of procedures to ensure that each waste volume remains in the unit for no more than 90 days, a written description of the waste generation and management practices for the facility showing that they are consistent with respecting the 90 day limit, and documentation that the procedures are complied with; or

(B) Documentation that the unit is emptied at least once every 90 days.

In addition, such a generator is exempt from all the requirements in subparts G and H of 40 CFR part 265, except for §§ 265.111 and 265.114.

(2) The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container;

(3) While being accumulated on-site, each container and tank is labeled or marked clearly with the words, "Hazardous Waste"; and

(4) The generator complies with the requirements for owners or operators in Subparts C and D in 40 CFR part 265, with § 265.16, and with 40 CFR 268.7(a)(5).

(b) A generator who accumulates hazardous waste for more than 90 days is an operator of a storage facility and is subject to the requirements of 40 CFR

§ 262.34**40 CFR Ch. I (7–1–06 Edition)**

parts 264 and 265 and the permit requirements of 40 CFR part 270 unless he has been granted an extension to the 90-day period. Such extension may be granted by EPA if hazardous wastes must remain on-site for longer than 90 days due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to 30 days may be granted at the discretion of the Regional Administrator on a case-by-case basis.

(c)(1) A generator may accumulate as much as 55 gallons of hazardous waste or one quart of acutely hazardous waste listed in §261.33(e) in containers at or near any point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit or interim status and without complying with paragraph (a) of this section provided he:

(i) Complies with §§265.171, 265.172, and 265.173(a) of this chapter; and

(ii) Marks his containers either with the words "Hazardous Waste" or with other words that identify the contents of the containers.

(2) A generator who accumulates either hazardous waste or acutely hazardous waste listed in §261.33(e) in excess of the amounts listed in paragraph (c)(1) of this section at or near any point of generation must, with respect to that amount of excess waste, comply within three days with paragraph (a) of this section or other applicable provisions of this chapter. During the three day period the generator must continue to comply with paragraphs (c)(1)(i) through (ii) of this section. The generator must mark the container holding the excess accumulation of hazardous waste with the date the excess amount began accumulating.

(d) A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month may accumulate hazardous waste on-site for 180 days or less without a permit or without having interim status provided that:

(1) The quantity of waste accumulated on-site never exceeds 6000 kilograms;

(2) The generator complies with the requirements of subpart I of part 265 of this chapter, except for §§265.176 and 265.178;

(3) The generator complies with the requirements of §265.201 in subpart J of part 265;

(4) The generator complies with the requirements of paragraphs (a)(2) and (a)(3) of this section, the requirements of subpart C of part 265, the requirements of 40 CFR 268.7(a)(5); and

(5) The generator complies with the following requirements:

(i) At all times there must be at least one employee either on the premises or on call (*i.e.*, available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures specified in paragraph (d)(5)(iv) of this section. This employee is the emergency coordinator.

(ii) The generator must post the following information next to the telephone:

(A) The name and telephone number of the emergency coordinator;

(B) Location of fire extinguishers and spill control material, and, if present, fire alarm; and

(C) The telephone number of the fire department, unless the facility has a direct alarm.

(iii) The generator must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies;

(iv) The emergency coordinator or his designee must respond to any emergencies that arise. The applicable responses are as follows:

(A) In the event of a fire, call the fire department or attempt to extinguish it using a fire extinguisher;

(B) In the event of a spill, contain the flow of hazardous waste to the extent possible, and as soon as is practicable, clean up the hazardous waste and any contaminated materials or soil;

(C) In the event of a fire, explosion, or other release which could threaten human health outside the facility or when the generator has knowledge that a spill has reached surface water, the generator must immediately notify the National Response Center (using their 24-hour toll free number 800/424-8802). The report must include the following information:

Environmental Protection Agency**§ 262.34**

(1) The name, address, and U.S. EPA Identification Number of the generator;

(2) Date, time, and type of incident (*e.g.*, spill or fire);

(3) Quantity and type of hazardous waste involved in the incident;

(4) Extent of injuries, if any; and

(5) Estimated quantity and disposition of recovered materials, if any.

(e) A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month and who must transport his waste, or offer his waste for transportation, over a distance of 200 miles or more for off-site treatment, storage or disposal may accumulate hazardous waste on-site for 270 days or less without a permit or without having interim status provided that he complies with the requirements of paragraph (d) of this section.

(f) A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month and who accumulates hazardous waste in quantities exceeding 6000 kg or accumulates hazardous waste for more than 180 days (or for more than 270 days if he must transport his waste, or offer his waste for transportation, over a distance of 200 miles or more) is an operator of a storage facility and is subject to the requirements of 40 CFR parts 264 and 265 and the permit requirements of 40 CFR part 270 unless he has been granted an extension to the 180-day (or 270-day if applicable) period. Such extension may be granted by EPA if hazardous wastes must remain on-site for longer than 180 days (or 270 days if applicable) due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to 30 days may be granted at the discretion of the Regional Administrator on a case-by-case basis.

(g) A generator who generates 1,000 kilograms or greater of hazardous waste per calendar month who also generates wastewater treatment sludges from electroplating operations that meet the listing description for the RCRA hazardous waste code F006, may accumulate F006 waste on-site for more than 90 days, but not more than 180 days without a permit or without having interim status provided that:

(1) The generator has implemented pollution prevention practices that reduce the amount of any hazardous substances, pollutants or contaminants entering F006 or otherwise released to the environment prior to its recycling;

(2) The F006 waste is legitimately recycled through metals recovery;

(3) No more than 20,000 kilograms of F006 waste is accumulated on-site at any one time; and

(4) The F006 waste is managed in accordance with the following:

(i) The F006 waste is placed:

(A) In containers and the generator complies with the applicable requirements of subparts I, AA, BB, and CC of 40 CFR part 265; and/or

(B) In tanks and the generator complies with the applicable requirements of subparts J, AA, BB, and CC of 40 CFR part 265, except §§265.197(c) and 265.200; and/or

(C) In containment buildings and the generator complies with subpart DD of 40 CFR part 265, and has placed its professional engineer certification that the building complies with the design standards specified in 40 CFR 265.1101 in the facility's operating record prior to operation of the unit. The owner or operator must maintain the following records at the facility:

(1) A written description of procedures to ensure that the F006 waste remains in the unit for no more than 180 days, a written description of the waste generation and management practices for the facility showing that they are consistent with the 180-day limit, and documentation that the generator is complying with the procedures; or

(2) Documentation that the unit is emptied at least once every 180 days.

(ii) In addition, such a generator is exempt from all the requirements in subparts G and H of 40 CFR part 265, except for §§265.111 and 265.114.

(iii) The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container;

(iv) While being accumulated on-site, each container and tank is labeled or marked clearly with the words, "Hazardous Waste;" and

(v) The generator complies with the requirements for owners or operators in subparts C and D in 40 CFR part 265,

§ 262.34**40 CFR Ch. I (7–1–06 Edition)**

with 40 CFR 265.16, and with 40 CFR 268.7(a)(5).

(h) A generator who generates 1,000 kilograms or greater of hazardous waste per calendar month who also generates wastewater treatment sludges from electroplating operations that meet the listing description for the RCRA hazardous waste code F006, and who must transport this waste, or offer this waste for transportation, over a distance of 200 miles or more for off-site metals recovery, may accumulate F006 waste on-site for more than 90 days, but not more than 270 days without a permit or without having interim status if the generator complies with the requirements of paragraphs (g)(1) through (g)(4) of this section.

(i) A generator accumulating F006 in accordance with paragraphs (g) and (h) of this section who accumulates F006 waste on-site for more than 180 days (or for more than 270 days if the generator must transport this waste, or offer this waste for transportation, over a distance of 200 miles or more), or who accumulates more than 20,000 kilograms of F006 waste on-site is an operator of a storage facility and is subject to the requirements of 40 CFR parts 264 and 265 and the permit requirements of 40 CFR part 270 unless the generator has been granted an extension to the 180-day (or 270-day if applicable) period or an exception to the 20,000 kilogram accumulation limit. Such extensions and exceptions may be granted by EPA if F006 waste must remain on-site for longer than 180 days (or 270 days if applicable) or if more than 20,000 kilograms of F006 waste must remain on-site due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to 30 days or an exception to the accumulation limit may be granted at the discretion of the Regional Administrator on a case-by-case basis.

(j) A member of the Performance Track Program who generates 1000 kg or greater of hazardous waste per month (or one kilogram or more of acute hazardous waste) may accumulate hazardous waste on-site without a permit or interim status for an extended period of time, provided that:

(1) The generator accumulates the hazardous waste for no more than 180

days, or for no more than 270 days if the generator must transport the waste (or offer the waste for transport) more than 200 miles from the generating facility; and

(2) The generator first notifies the Regional Administrator and the Director of the authorized State in writing of its intent to begin accumulation of hazardous waste for extended time periods under the provisions of this section. Such advance notice must include:

(i) Name and EPA ID number of the facility, and specification of when the facility will begin accumulation of hazardous wastes for extended periods of time in accordance with this section; and

(ii) A description of the types of hazardous wastes that will be accumulated for extended periods of time, and the units that will be used for such extended accumulation; and

(iii) A Statement that the facility has made all changes to its operations, procedures, including emergency preparedness procedures, and equipment, including equipment needed for emergency preparedness, that will be necessary to accommodate extended time periods for accumulating hazardous wastes; and

(iv) If the generator intends to accumulate hazardous wastes on-site for up to 270 days, a certification that a facility that is permitted (or operating under interim status) under part 270 of this chapter to receive these wastes is not available within 200 miles of the generating facility; and

(3) The waste is managed in:

(i) Containers, in accordance with the applicable requirements of subparts I, AA, BB, and CC of 40 CFR part 265 and 40 CFR 264.175; or

(ii) Tanks, in accordance with the applicable requirements of subparts J, AA, BB, and CC of 40 CFR part 265, except for §§ 265.197(c) and 265.200; or

(iii) Drip pads, in accordance with subpart W of 40 CFR part 265; or

(iv) Containment buildings, in accordance with subpart DD of 40 CFR part 265; and

(4) The quantity of hazardous waste that is accumulated for extended time periods at the facility does not exceed 30,000 kg; and

Environmental Protection Agency**§ 262.34**

(5) The generator maintains the following records at the facility for each unit used for extended accumulation times:

(i) A written description of procedures to ensure that each waste volume remains in the unit for no more than 180 days (or 270 days, as applicable), a description of the waste generation and management practices at the facility showing that they are consistent with the extended accumulation time limit, and documentation that the procedures are complied with; or

(ii) Documentation that the unit is emptied at least once every 180 days (or 270 days, if applicable); and

(6) Each container or tank that is used for extended accumulation time periods is labeled or marked clearly with the words "Hazardous Waste," and for each container the date upon which each period of accumulation begins is clearly marked and visible for inspection; and

(7) The generator complies with the requirements for owners and operators in 40 CFR part 265, with §265.16, and with §268.7(a)(5). In addition, such a generator is exempt from all the requirements in subparts G and H of part 265, except for §§265.111 and 265.114; and

(8) The generator has implemented pollution prevention practices that reduce the amount of any hazardous substances, pollutants, or contaminants released to the environment prior to its recycling, treatment, or disposal; and

(9) The generator includes the following with its Performance Track Annual Performance Report, which must be submitted to the Regional Administrator and the Director of the authorized State:

(i) Information on the total quantity of each hazardous waste generated at the facility that has been managed in the previous year according to extended accumulation time periods; and

(ii) Information for the previous year on the number of off-site shipments of hazardous wastes generated at the facility, the types and locations of destination facilities, how the wastes were managed at the destination facilities (*e.g.*, recycling, treatment, storage, or disposal), and what changes in on-site or off-site waste management practices

have occurred as a result of extended accumulation times or other pollution prevention provisions of this section; and

(iii) Information for the previous year on any hazardous waste spills or accidents occurring at extended accumulation units at the facility, or during off-site transport of accumulated wastes; and

(iv) If the generator intends to accumulate hazardous wastes on-site for up to 270 days, a certification that a facility that is permitted (or operating under interim status) under part 270 of this chapter to receive these wastes is not available within 200 miles of the generating facility; and

(k) If hazardous wastes must remain on-site at a Performance Track member facility for longer than 180 days (or 270 days, if applicable) due to unforeseen, temporary, and uncontrollable circumstances, an extension to the extended accumulation time period of up to 30 days may be granted at the discretion of the Regional Administrator on a case-by-case basis.

(1) If a generator who is a member of the Performance Track Program withdraws from the Performance Track Program, or if the Regional Administrator terminates a generator's membership, the generator must return to compliance with all otherwise applicable hazardous waste regulations as soon as possible, but no later than six months after the date of withdrawal or termination.

(m) A generator who sends a shipment of hazardous waste to a designated facility with the understanding that the designated facility can accept and manage the waste and later receives that shipment back as a rejected load or residue in accordance with the manifest discrepancy provisions of §264.72 or §265.72 of this chapter may accumulate the returned waste on-site in accordance with paragraphs (a) and (b) or (d), (e) and (f) of this section, depending on the amount of hazardous waste on-site in that calendar month. Upon receipt of the returned shipment, the generator must:

(1) Sign Item 18c of the manifest, if the transporter returned the shipment using the original manifest; or

§ 262.40

(2) Sign Item 20 of the manifest, if the transporter returned the shipment using a new manifest.

[47 FR 1251, Jan. 11, 1982, as amended at 48 FR 14294, Apr. 1, 1983; 49 FR 49571, Dec. 20, 1984; 51 FR 10175, Mar. 24, 1986; 51 FR 25472, July 14, 1986; 55 FR 22684, June 1, 1990; 55 FR 50483, Dec. 6, 1990; 56 FR 3877, Jan. 31, 1991; 56 FR 30195, July 1, 1991; 57 FR 37264, Aug. 18, 1992; 59 FR 62926, Dec. 6, 1994; 61 FR 4911, Feb. 9, 1996; 61 FR 59950, Nov. 25, 1996; 64 FR 3388, Jan. 21, 1999; 64 FR 25414, May 11, 1999; 64 FR 56471, Oct. 20, 1999; 65 FR 12397, Mar. 8, 2000; 69 FR 21753, Apr. 22, 2004; 69 FR 62224, Oct. 25, 2004; 70 FR 10817, Mar. 4, 2005]

Subpart D—Recordkeeping and Reporting

§ 262.40 Recordkeeping.

(a) A generator must keep a copy of each manifest signed in accordance with § 262.23(a) for three years or until he receives a signed copy from the designated facility which received the waste. This signed copy must be retained as a record for at least three years from the date the waste was accepted by the initial transporter.

(b) A generator must keep a copy of each Biennial Report and Exception Report for a period of at least three years from the due date of the report.

(c) A generator must keep records of any test results, waste analyses, or other determinations made in accordance with § 262.11 for at least three years from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal.

(d) The periods or retention referred to in this section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Administrator.

[45 FR 33142, May 19, 1980, as amended at 48 FR 3981, Jan. 28, 1983]

§ 262.41 Biennial report.

(a) A generator who ships any hazardous waste off-site to a treatment, storage or disposal facility within the United States must prepare and submit a single copy of a Biennial Report to the Regional Administrator by March 1 of each even numbered year. The Biennial Report must be submitted on EPA Form 8700-13A, must cover generator

40 CFR Ch. I (7-1-06 Edition)

activities during the previous year, and must include the following information:

(1) The EPA identification number, name, and address of the generator;

(2) The calendar year covered by the report;

(3) The EPA identification number, name, and address for each off-site treatment, storage, or disposal facility in the United States to which waste was shipped during the year;

(4) The name and EPA identification number of each transporter used during the reporting year for shipments to a treatment, storage or disposal facility within the United States;

(5) A description, EPA hazardous waste number (from 40 CFR part 261, subpart C or D), DOT hazard class, and quantity of each hazardous waste shipped off-site for shipments to a treatment, storage or disposal facility within the United States. This information must be listed by EPA identification number of each such off-site facility to which waste was shipped.

(6) A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated.

(7) A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984.

(8) The certification signed by the generator or authorized representative.

(b) Any generator who treats, stores, or disposes of hazardous waste on-site must submit a biennial report covering those wastes in accordance with the provisions of 40 CFR parts 270, 264, 265, and 266. Reporting for exports of hazardous waste is not required on the Biennial Report form. A separate annual report requirement is set forth at 40 CFR 262.56.

[48 FR 3981, Jan. 28, 1983, as amended at 48 FR 14294, Apr. 1, 1983; 50 FR 28746, July 15, 1985; 51 FR 28682, Aug. 8, 1986]

§ 262.42 Exception reporting.

(a)(1) A generator of greater than 1000 kilograms of hazardous waste in a calendar month who does not receive a

§ 266.70**40 CFR Ch. I (7–1–06 Edition)****Subparts D–E [Reserved]****Subpart F—Recyclable Materials Utilized for Precious Metal Recovery****§ 266.70 Applicability and requirements.**

(a) The regulations of this subpart apply to recyclable materials that are reclaimed to recover economically significant amounts of gold, silver, platinum, palladium, iridium, osmium, rhodium, ruthenium, or any combination of these.

(b) Persons who generate, transport, or store recyclable materials that are regulated under this subpart are subject to the following requirements:

(1) Notification requirements under section 3010 of RCRA;

(2) Subpart B of part 262 (for generators), §§ 263.20 and 263.21 (for transporters), and §§ 265.71 and 265.72 (for persons who store) of this chapter; and

(3) For precious metals exported to or imported from designated OECD member countries for recovery, subpart H of part 262 and § 265.12(a)(2) of this chapter. For precious metals exported to or imported from non-OECD countries for recovery, subparts E and F of 40 CFR part 262.

(c) Persons who store recycled materials that are regulated under this subpart must keep the following records to document that they are not accumu-

lating these materials speculatively (as defined in § 261.1(c) of this chapter);

(1) Records showing the volume of these materials stored at the beginning of the calendar year;

(2) The amount of these materials generated or received during the calendar year; and

(3) The amount of materials remaining at the end of the calendar year.

(d) Recyclable materials that are regulated under this subpart that are accumulated speculatively (as defined in § 261.1(c) of this chapter) are subject to all applicable provisions of parts 262 through 265, 270 and 124 of this chapter.

[50 FR 666, Jan. 4, 1985, as amended at 61 FR 16315, Apr. 12, 1996]

Subpart G—Spent Lead-Acid Batteries Being Reclaimed**§ 266.80 Applicability and requirements.**

(a) Are spent lead-acid batteries exempt from hazardous waste management requirements? If you generate, collect, transport, store, or regenerate lead-acid batteries for reclamation purposes, you may be exempt from certain hazardous waste management requirements. Use the following table to determine which requirements apply to you. Alternatively, you may choose to manage your spent lead-acid batteries under the “Universal Waste” rule in 40 CFR part 273.

If your batteries * * *	And if you * * *	Then you * * *	And you * * *
(1) Will be reclaimed through regeneration (such as by electrolyte replacement).		are exempt from 40 CFR parts 262 (except for § 262.11) 263, 264, 265, 266, 268, 270, 124 of this chapter, and the notification requirements at section 3010 of RCRA.	are subject to 40 CFR parts 261 and § 262.11 of this chapter.
(2) Will be reclaimed other than through regeneration.	generate, collect, and/or transport these batteries.	are exempt from 40 CFR parts 262 (except for § 262.11) 263, 264, 265, 266, 270, 124 of this chapter, and the notification requirements at section 3010 of RCRA.	are subject to 40 CFR parts 261 and § 262.11, and applicable provisions under part 268.
(3) Will be reclaimed other than through regeneration.	store these batteries but you aren't the reclaimer.	are exempt from 40 CFR parts 262 (except for § 262.11) 263, 264, 265, 266, 270, 124 of this chapter, and the notification requirements at section 3010 of RCRA.	are subject to 40 CFR parts 261, § 262.11, and applicable provisions under part 268.
(4) Will be reclaimed other than through regeneration.	store these batteries before you reclaim them.	must comply with 40 CFR 266.80(b) and as appropriate other regulatory provisions described in 266.80(b).	are subject to 40 CFR parts 261, § 262.11, and applicable provisions under part 268.
(5) Will be reclaimed other than through regeneration.	don't store these batteries before you reclaim them.	are exempt from 40 CFR parts 262 (except for § 262.11) 263, 264, 265, 266, 270, 124 of this chapter, and the notification requirements at section 3010 of RCRA.	are subject to 40 CFR parts 261, § 262.11, and applicable provisions under part 268.

§ 273.10

that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign destination.

(b) Does not mean:

(1) A person who treats (except under the provisions of 40 CFR 273.13 (a) or (c), or 273.33 (a) or (c)), disposes of, or recycles universal waste; or

(2) A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility.

Universal Waste Transfer Facility means any transportation-related facility including loading docks, parking areas, storage areas and other similar areas where shipments of universal waste are held during the normal course of transportation for ten days or less.

Universal Waste Transporter means a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.

[60 FR 25542, May 11, 1995, as amended at 63 FR 71230, Dec. 24, 1998. Redesignated and amended at 64 FR 36488, 36489, July 6, 1999; 70 FR 45521, Aug. 5, 2005]

Subpart B—Standards for Small Quantity Handlers of Universal Waste

§ 273.10 Applicability.

This subpart applies to small quantity handlers of universal waste (as defined in 40 CFR 273.9).

[64 FR 36489, July 6, 1999]

§ 273.11 Prohibitions.

A small quantity handler of universal waste is:

(a) Prohibited from disposing of universal waste; and

(b) Prohibited from diluting or treating universal waste, except by responding to releases as provided in 40 CFR 273.17; or by managing specific wastes as provided in 40 CFR 273.13.

§ 273.12 Notification.

A small quantity handler of universal waste is not required to notify EPA of universal waste handling activities.

40 CFR Ch. I (7–1–06 Edition)**§ 273.13 Waste management.**

(a) *Universal waste batteries.* A small quantity handler of universal waste must manage universal waste batteries in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(1) A small quantity handler of universal waste must contain any universal waste battery that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be closed, structurally sound, compatible with the contents of the battery, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(2) A small quantity handler of universal waste may conduct the following activities as long as the casing of each individual battery cell is not breached and remains intact and closed (except that cells may be opened to remove electrolyte but must be immediately closed after removal):

- (i) Sorting batteries by type;
- (ii) Mixing battery types in one container;
- (iii) Discharging batteries so as to remove the electric charge;
- (iv) Regenerating used batteries;
- (v) Disassembling batteries or battery packs into individual batteries or cells;
- (vi) Removing batteries from consumer products; or
- (vii) Removing electrolyte from batteries.

(3) A small quantity handler of universal waste who removes electrolyte from batteries, or who generates other solid waste (e.g., battery pack materials, discarded consumer products) as a result of the activities listed above, must determine whether the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste identified in 40 CFR part 261, subpart C.

(i) If the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste, it is subject to all applicable requirements of 40 CFR parts 260 through 272. The handler is considered the generator of the hazardous electrolyte and/or other waste and is subject to 40 CFR part 262.

§ 273.10

that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign destination.

(b) Does not mean:

(1) A person who treats (except under the provisions of 40 CFR 273.13 (a) or (c), or 273.33 (a) or (c)), disposes of, or recycles universal waste; or

(2) A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility.

Universal Waste Transfer Facility means any transportation-related facility including loading docks, parking areas, storage areas and other similar areas where shipments of universal waste are held during the normal course of transportation for ten days or less.

Universal Waste Transporter means a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.

[60 FR 25542, May 11, 1995, as amended at 63 FR 71230, Dec. 24, 1998. Redesignated and amended at 64 FR 36488, 36489, July 6, 1999; 70 FR 45521, Aug. 5, 2005]

Subpart B—Standards for Small Quantity Handlers of Universal Waste

§ 273.10 Applicability.

This subpart applies to small quantity handlers of universal waste (as defined in 40 CFR 273.9).

[64 FR 36489, July 6, 1999]

§ 273.11 Prohibitions.

A small quantity handler of universal waste is:

(a) Prohibited from disposing of universal waste; and

(b) Prohibited from diluting or treating universal waste, except by responding to releases as provided in 40 CFR 273.17; or by managing specific wastes as provided in 40 CFR 273.13.

§ 273.12 Notification.

A small quantity handler of universal waste is not required to notify EPA of universal waste handling activities.

40 CFR Ch. I (7–1–06 Edition)**§ 273.13 Waste management.**

(a) *Universal waste batteries.* A small quantity handler of universal waste must manage universal waste batteries in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(1) A small quantity handler of universal waste must contain any universal waste battery that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be closed, structurally sound, compatible with the contents of the battery, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(2) A small quantity handler of universal waste may conduct the following activities as long as the casing of each individual battery cell is not breached and remains intact and closed (except that cells may be opened to remove electrolyte but must be immediately closed after removal):

- (i) Sorting batteries by type;
- (ii) Mixing battery types in one container;
- (iii) Discharging batteries so as to remove the electric charge;
- (iv) Regenerating used batteries;
- (v) Disassembling batteries or battery packs into individual batteries or cells;
- (vi) Removing batteries from consumer products; or
- (vii) Removing electrolyte from batteries.

(3) A small quantity handler of universal waste who removes electrolyte from batteries, or who generates other solid waste (e.g., battery pack materials, discarded consumer products) as a result of the activities listed above, must determine whether the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste identified in 40 CFR part 261, subpart C.

(i) If the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste, it is subject to all applicable requirements of 40 CFR parts 260 through 272. The handler is considered the generator of the hazardous electrolyte and/or other waste and is subject to 40 CFR part 262.

Environmental Protection Agency**§ 273.13**

(ii) If the electrolyte or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(b) *Universal waste pesticides.* A small quantity handler of universal waste must manage universal waste pesticides in a way that prevent releases of any universal waste or component of a universal waste to the environment. The universal waste pesticides must be contained in one or more of the following:

(1) A container that remains closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions; or

(2) A container that does not meet the requirements of paragraph (b)(1) of this Section, provided that the unacceptable container is overpacked in a container that does meet the requirements of paragraph (b)(1) of this Section; or

(3) A tank that meets the requirements of 40 CFR part 265 subpart J, except for 40 CFR 265.197(c), 265.200, and 265.201; or

(4) A transport vehicle or vessel that is closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(c) *Mercury-containing equipment.* A small quantity handler of universal waste must manage universal waste mercury-containing equipment in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(1) A small quantity handler of universal waste must place in a container any universal waste mercury-containing equipment with non-contained elemental mercury or that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container must be closed, structurally sound, compatible with the contents of the device, must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably fore-

seeable conditions, and must be reasonably designed to prevent the escape of mercury into the environment by volatilization or any other means.

(2) A small quantity handler of universal waste may remove mercury-containing ampules from universal waste mercury-containing equipment provided the handler:

(i) Removes and manages the ampules in a manner designed to prevent breakage of the ampules;

(ii) Removes the ampules only over or in a containment device (*e.g.*, tray or pan sufficient to collect and contain any mercury released from an ampule in case of breakage);

(iii) Ensures that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks from broken ampules from that containment device to a container that meets the requirements of 40 CFR 262.34;

(iv) Immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that meets the requirements of 40 CFR 262.34;

(v) Ensures that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;

(vi) Ensures that employees removing ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers;

(vii) Stores removed ampules in closed, non-leaking containers that are in good condition;

(viii) Packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation;

(3) A small quantity handler of universal waste mercury-containing equipment that does not contain an ampule may remove the open original housing holding the mercury from universal waste mercury-containing equipment provided the handler:

(i) Immediately seals the original housing holding the mercury with an air-tight seal to prevent the release of any mercury to the environment; and

§ 273.14

(ii) Follows all requirements for removing ampules and managing removed ampules under paragraph (c)(2) of this section; and

(4) (i) A small quantity handler of universal waste who removes mercury-containing ampules from mercury-containing equipment or seals mercury from mercury-containing equipment in its original housing must determine whether the following exhibit a characteristic of hazardous waste identified in 40 CFR part 261, subpart C:

(A) Mercury or clean-up residues resulting from spills or leaks and/or

(B) Other solid waste generated as a result of the removal of mercury-containing ampules or housings (*e.g.*, the remaining mercury-containing device).

(ii) If the mercury, residues, and/or other solid waste exhibits a characteristic of hazardous waste, it must be managed in compliance with all applicable requirements of 40 CFR parts 260 through 272. The handler is considered the generator of the mercury, residues, and/or other waste and must manage it in compliance with 40 CFR part 262.

(iii) If the mercury, residues, and/or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(d) *Lamps.* A small quantity handler of universal waste must manage lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(1) A small quantity handler of universal waste must contain any lamp in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers and packages must remain closed and must lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.

(2) A small quantity handler of universal waste must immediately clean up and place in a container any lamp that is broken and must place in a container any lamp that shows evidence of breakage, leakage, or damage that could cause the release of mercury or

40 CFR Ch. I (7–1–06 Edition)

other hazardous constituents to the environment. Containers must be closed, structurally sound, compatible with the contents of the lamps and must lack evidence of leakage, spillage or damage that could cause leakage or releases of mercury or other hazardous constituents to the environment under reasonably foreseeable conditions.

[60 FR 25542, May 11, 1995, as amended at 64 FR 36489, July 6, 1999; 70 FR 45521, Aug. 5, 2005]

§ 273.14 Labeling/markings.

A small quantity handler of universal waste must label or mark the universal waste to identify the type of universal waste as specified below:

(a) Universal waste batteries (*i.e.*, each battery), or a container in which the batteries are contained, must be labeled or marked clearly with any one of the following phrases: “Universal Waste—Battery(ies),” or “Waste Battery(ies),” or “Used Battery(ies);”

(b) A container, (or multiple container package unit), tank, transport vehicle or vessel in which recalled universal waste pesticides as described in 40 CFR 273.3(a)(1) are contained must be labeled or marked clearly with:

(1) The label that was on or accompanied the product as sold or distributed; and

(2) The words “Universal Waste-Pesticide(s)” or “Waste-Pesticide(s);”

(c) A container, tank, or transport vehicle or vessel in which unused pesticide products as described in 40 CFR 273.3(a)(2) are contained must be labeled or marked clearly with:

(1)(i) The label that was on the product when purchased, if still legible;

(ii) If using the labels described in paragraph (c)(1)(i) of this section is not feasible, the appropriate label as required under the Department of Transportation regulation 49 CFR part 172;

(iii) If using the labels described in paragraphs (c)(1) (i) and (ii) of this section is not feasible, another label prescribed or designated by the waste pesticide collection program administered or recognized by a state; and

(2) The words “Universal Waste-Pesticide(s)” or “Waste-Pesticide(s).”

(d)(1) Universal waste mercury-containing equipment (*i.e.*, each device), or a container in which the equipment is

Ch. 261a

IDENTIFICATION AND LISTING

25 § 261a.1

CHAPTER 261a. IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

Subchap.	Sec.
A. GENERAL	261a.1
D. LISTS OF HAZARDOUS WASTES	261a.32

Authority

The provisions of this Chapter 261a issued under sections 105, 401—403 and 501 of the Solid Waste Management Act (35 P. S. §§ 6018.105, 6018.401—6018.403 and 6018.501); sections 105, 402 and 501 of The Clean Streams Law (35 P. S. §§ 691.105, 691.402 and 691.501); and section 1920-A of The Administrative Code of 1929 (71 P. S. § 510-20); amended under section 105(a) of the Solid Waste Management Act (35 P. S. § 6018.105(a)); sections 5(b) and 402 of The Clean Streams Law (35 P. S. §§ 691.5(b) and 691.402); section 302 of the Municipal Waste Planning Recycling and Waste Reduction Act (58 P. S. § 4000.302); section 480(e) of the Pennsylvania Used Oil Recycling Act (58 P. S. § 480(e)); and sections 1905-A, 1917-A and 1920-A of The Administrative Code of 1929 (71 P. S. §§ 510-5, 510-17 and 510-20); amended under section 207(a) of the Small Business and Household Pollution Prevention Program Act (35 P. S. § 6029.207(a)); section 105(a) of the Solid Waste Management Act (35 P. S. § 6018.105(a)); section 4(a) of the Household Hazardous Waste Funding Act (35 P. S. § 6025.4(a)); sections 5(b), 304 and 402 of The Clean Streams Law (35 P. S. §§ 691.5(b), 691.304 and 691.402); section 302 of the Municipal Waste Planning, Recycling and Waste Reduction Act (53 P. S. § 4000.302); and sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P. S. §§ 510-17 and 510-20), unless otherwise noted.

Source

The provisions of this Chapter 261a adopted April 30, 1999, effective May 1, 1999, 29 Pa.B. 2367, unless otherwise noted.

Cross References

This chapter cited in 25 Pa. Code § 252.3 (relating to scope); 25 Pa. Code § 264a.1 (relating to incorporation by reference, purpose, scope and reference); 25 Pa. Code § 265a.1 (relating to incorporation by reference, purpose, scope and applicability); 25 Pa. Code § 266b.2 (relating to applicability—mercury-containing devices); 25 Pa. Code § 266b.11 (relating to waste management for universal waste mercury-containing devices); 25 Pa. Code § 266b.31 (relating to waste management for universal waste mercury-containing devices); 25 Pa. Code § 287.1 (relating to definitions); 25 Pa. Code § 287.54 (relating to chemical analysis of waste); 25 Pa. Code § 287.102 (relating to permit by rule); 25 Pa. Code § 287.132 (relating to chemical analysis of waste); 25 Pa. Code § 298.10 (relating to applicability); 25 Pa. Code § 298.54 (relating to waste oil management); and 25 Pa. Code § 298.55 (relating to analysis plan).

Subchapter A. GENERAL

Sec.	
261a.1.	Incorporation by reference, purpose and scope.
261a.2.	Definition of “solid waste.”
261a.3.	Definition of “hazardous waste.”
261a.4.	Exclusions.
261a.5.	Special requirements for hazardous waste generated by conditionally exempt small quantity generators.

261a-1

(317311) No. 377 Apr. 06

25 § 261a.1**ENVIRONMENTAL PROTECTION**

Pt. I

- 261a.6. Requirements for recyclable materials.
- 261a.7. Residues of hazardous waste in empty containers.
- 261a.8. Requirements for universal rule.

§ 261a.1. Incorporation by reference, purpose and scope.

Except as expressly provided in this chapter, 40 CFR Part 261 and its appendices (relating to identification and listing of hazardous waste) are incorporated by reference. The substitution of terms in § 260a.3(a)(1) (relating to terminology and citations related to Federal regulations) does not apply to 40 CFR 261.4(f)(1), 261.10 and 261.11 (relating to notification of treatability studies; criteria for identifying the characteristics of hazardous waste; and criteria for listing hazardous waste). The substitution of terms in § 260a.3(a)(3) does not apply to Appendix IX (relating to wastes excluded under §§ 260.20 and 260.22) of the CFR.

Cross References

This section cited in 25 Pa. Code § 271.1 (relating to definitions); 25 Pa. Code § 272.501 (relating to scope); 25 Pa. Code § 287.1 (relating to definitions); 25 Pa. Code § 287.8 (relating to coproduct determinations); 25 Pa. Code § 287.54 (relating to chemical analysis of waste); 25 Pa. Code § 287.132 (relating to chemical analysis of waste); 25 Pa. Code § 298.10 (relating to applicability); 25 Pa. Code § 298.40 (relating to applicability); 25 Pa. Code § 298.44 (relating to rebuttable presumption for waste oil and flash point screening); 25 Pa. Code § 298.53 (relating to rebuttable presumption for waste oil and flash point screening); and 25 Pa. Code § 298.63 (relating to rebuttable presumption for waste oil).

§ 261a.2. Definition of “solid waste.”

Materials that are excluded from the definition of “solid waste” in 40 CFR 261.2(c)—(e) (relating to the definition of “solid waste”) shall be managed in accordance with Chapters 287—299 (relating to residual waste management).

Source

The provisions of this § 261a.2 adopted June 1, 2001, effective June 2, 2001, 31 Pa.B. 2873.

§ 261a.3. Definition of “hazardous waste.”

(a) 40 CFR 261.3(c)(2)(ii)(C) (relating to certain non-wastewater residues such as slag resulting from HTMR processing of K061, K062 or F006 waste) is not incorporated by reference.

(b) In addition to the requirements incorporated by reference, except when the waste is contaminated media subject to remediation, when it is not promptly possible to determine if a material will be a hazardous waste, the material shall be managed as a hazardous waste until the determination is made that indicates it is not a hazardous waste.

Source

The provisions of this § 261a.3 amended December 13, 2002, effective December 14, 2002, 32 Pa.B. 6102. Immediately preceding text appears at serial page (284428).

261a-2

(317312) No. 377 Apr. 06

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Ch. 261a

IDENTIFICATION AND LISTING

25 § 261a.4**§ 261a.4. Exclusions.**

In addition to the requirements incorporated by reference:

(1) The exclusion in 40 CFR 261.4(b)(1) (relating to exclusions) does not apply to household hazardous waste as defined in § 271.1 (relating to definitions) if the waste is collected as part of a collection event or collected at an out-of-State household hazardous waste collection and brought into this Commonwealth for processing, treatment, storage or disposal.

(2) A copy of the written State agreement required by 40 CFR 261.4(b)(11)(ii) that includes a provision to assess the groundwater and the need for further remediation once the free phase recovery is completed for free phase hydrocarbon recovery operations shall be submitted to: Pennsylvania Department of Environmental Protection, Bureau of Land Recycling and Waste Management, Division of Hazardous Waste Management, Post Office Box 8471, Harrisburg, Pennsylvania 17105-8471.

Source

The provisions of this § 261a.4 amended October 5, 2001, effective October 6, 2001, 31 Pa.B. 5547. Immediately preceding text appears at serial page (280178).

§ 261a.5. Special requirements for hazardous waste generated by conditionally exempt small quantity generators.

(a) The reference to 40 CFR Part 279 in 40 CFR 261.5(c)(4) and (j) (relating to special requirements for hazardous waste generated by conditionally exempt small quantity generators) is replaced with Chapter 298 (relating to management of waste oil).

(b) In addition to the requirements incorporated by reference, a conditionally exempt small quantity generator may not dispose of hazardous waste in a municipal or residual waste landfill in this Commonwealth.

(c) A conditionally exempt small quantity generator complying with this subchapter and 40 CFR 261.5 is deemed to have a license for the transportation of those conditionally exempt small quantity generator wastes generated by the generator's own operation.

Source

The provision of this § 261a.5 amended June 1, 2001, effective June 2, 2001, 31 Pa.B. 2873; amended December 13, 2002, effective December 14, 2002, 32 Pa.B. 6102. Immediately preceding text appears at serial page (284429).

Cross References

This section cited in 25 Pa. Code § 264a.11 (relating to identification number and transporter license); and 25 Pa. Code § 265a.11 (relating to identification number and transporter license).

261a-3

(317313) No. 377 Apr. 06

25 § 261a.6**ENVIRONMENTAL PROTECTION**

Pt. I

§ 261a.6. Requirements for recyclable materials.

(a) The reference to “Part 279 of this chapter” in 40 CFR 261.6(a)(4) (relating to requirements for recyclable materials) is replaced with Chapter 298 (relating to management of waste oil).

(b) 40 CFR 261.6(c) is not incorporated by reference.

(c) Instead of 40 CFR 261.6(c), owners and operators of facilities that store or treat recyclable materials are regulated under all applicable and incorporated provisions of 40 CFR Parts 264 and 265, Subparts A—L, AA, BB, CC and DD; 40 CFR Part 264 Subpart X; 40 CFR Parts 266 and 270, except as provided in 40 CFR 261.6(a).

(1) In addition, owners and operators of facilities regulated under this section are subject to the applicable provisions of:

(i) Chapter 264a and Chapter 265a, Subchapters A, B, D, E, G—J and P.

(ii) Chapter 264a, Subchapters X and DD.

(iii) Chapters 266a and 270a.

(2) Recycling processes that are not treatment are exempt from regulation except as provided in 40 CFR 261.6(d).

(3) The sizing, shaping or sorting of recyclable materials will not be considered treatment for purposes of this section.

(d) The requirements of §§ 270a.3, 264a.82, 264a.83, 265a.82 and 265a.83 do not apply to facilities or those portions of facilities that store or treat recyclable materials.

(e) References to § 279.11 in 40 CFR 261.6 are replaced with § 298.11 (relating to waste oil specifications).

Source

The provisions of this § 261a.6 amended June 1, 2001, effective June 2, 2001, 31 Pa.B. 2873. Immediately preceding text appears at serial pages (272702) to (272703).

Cross References

This section cited in 25 Pa. Code § 266a.70 (relating to applicability and requirements); 25 Pa. Code § 266a.80 (relating to applicability and requirements); and 25 Pa. Code § 287.8 (relating to coproduct determinations).

§ 261a.7. Residues of hazardous waste in empty containers.

(a) Hazardous waste removed from either an empty container or an inner liner removed from an empty container, as defined in 40 CFR 261.7(b) (relating to residues of hazardous waste in empty containers), is subject to this chapter and Chapters 262a—265a, 268a and 270a.

(b) For purposes of this section, the term “containers” includes tanks.

Cross References

This section cited in 25 Pa. Code § 298.40 (relating to applicability).

261a-4

(317314) No. 377 Apr. 06

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Ch. 261a

IDENTIFICATION AND LISTING

25 § 261a.8**§ 261a.8. Requirements for universal waste.**

In addition to the requirements incorporated by reference, mercury-containing devices as defined in § 266b.3 (relating to definitions) are included as wastes subject to regulation under Chapter 266b (relating to universal waste management).

Source

The provisions of this § 261a.8 adopted December 22, 2000, effective December 23, 2000, 30 Pa.B. 6587.

Subchapter D. LISTS OF HAZARDOUS WASTES

Sec.

261a.32. Hazardous wastes from specific sources.

Authority

The provisions of this Subchapter D issued under section 105(a) of the Solid Waste Management Act (35 P. S. § 6018.105(a)), unless otherwise noted.

Source

The provisions of this Subchapter D adopted February 10, 2006, effective February 11, 2006, 36 Pa.B. 705, unless otherwise noted.

§ 261a.32. Hazardous wastes from specific sources.

In addition to the requirements for lists of hazardous wastes incorporated by reference in 40 CFR 261.32 (relating to hazardous waste from specific sources), the solid wastes listed in Appendix IXa (relating to wastes excluded under 25 Pa. Code § 260a.20 and 40 CFR 260.20 and 260.22) are excluded under §§ 260a.1 and 260a.20 (relating to incorporation by reference, purpose, scope and applicability; and rulemaking petitions).

**APPENDIX IXa. WASTES EXCLUDED UNDER 25 Pa. Code § 260a.20
AND 40 CFR 260.20 AND 260.22.**

Table 2a. Wastes Excluded from Specific Sources

<i>Facility</i>	<i>Address</i>	<i>Waste Description</i>
Max Environmental Technologies, Inc.	233 Max Lane Yukon, PA 15698	Electric arc furnace dust (EAFD) that has been treated on site by MAX Environmental Technologies, Inc. (MAX) at a maximum annual rate of 300,000 cubic yards per year and disposed of in a Permitted Resource Conservation and Recovery Act Subtitle D/ Pennsylvania Class 1 residual waste landfill that has groundwater monitoring.

(1) *Delisting Levels:*

261a-5

(317315) No. 377 Apr. 06

25 § 261a.32**ENVIRONMENTAL PROTECTION**

Pt. I

*Facility**Address**Waste Description*

- (i) The constituent concentrations measured in either of the extracts specified in paragraph (2) may not exceed the following levels (mg/L): Antimony-0.206; Arsenic-0.0094; Barium-21; Beryllium-0.416; Cadmium-0.11; Chromium-0.60; Lead-0.75; Mercury-0.025; Nickel-11.0; Selenium-0.58; Silver-0.14; Thallium-0.088; Vanadium-21.1; Zinc-4.3.
- (ii) Total mercury may not exceed 1 mg/kg.
- (2) *Verification Testing:*
 - (i) On a batch basis, MAX must analyze a representative sample of the waste using the following:
 - (A) The Toxicity Characteristic Leaching Procedure (TCLP) , test Method 1311 in “Test Methods for Evaluating Solid Waste. Physical/Chemical Methods.” EPA publication SW-846, as incorporated by reference in 40 CFR 260.11.
 - (B) The TCLP as referenced above with an extraction fluid of pH 12 ±0.05 standard units.
 - (C) SW-846 Method 7470 for mercury.
 - (ii) The constituent concentrations measured must be less than the delisting levels established in paragraph (1).
- (3) *Changes in Operating Conditions:*
 - (i) If any of the approved EAFD generators significantly changes the manufacturing process or chemicals used in the manufacturing process or MAX significantly changes the treatment process or the type of chemicals used in the treatment process, MAX must notify the Department of the changes in writing.
 - (ii) MAX must handle wastes generated after the process change as hazardous until MAX has demonstrated that the wastes continue to meet the delisting levels set forth in paragraph (1) and that no new hazardous constituents listed in Appendix VIII of Part 261 have been introduced and MAX has received written approval from the Department.
- (4) *Data Submittals:*

261a-6

(317316) No. 377 Apr. 06

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Ch. 261a

IDENTIFICATION AND LISTING

25 § 261a.32*Facility**Address**Waste Description*

- (i) MAX must submit the data obtained through routine batch verification testing, as required by other conditions of this rule or conditions of the permit, to the Pennsylvania Department of Environmental Protection Southwest Region, 400 Waterfront Drive, Pittsburgh, Pennsylvania 15222.
 - (ii) The data from the initial full scale batch treatments following permit modification and construction of the treatment unit shall be submitted to the Department as it becomes available and prior to disposal of those batches.
 - (iii) The data submission frequency can be modified by the Department upon demonstration that the treatment method is effective.
 - (iv) All data must be accompanied by a signed copy of the certification statement in 40 CFR 260.22(i)(12).
 - (v) MAX must compile, summarize, and maintain on site for a minimum of 5 years records of operating conditions and analytical data. MAX must make these records available for inspection.
- (5) *Reopener Language:*
- (i) If, at any time after disposal of the delisted waste, MAX possesses or is otherwise made aware of any data for any of the approved disposal facilities (including but not limited to leachate data or groundwater monitoring data) relevant to the delisted waste indicating that any constituent identified in paragraph (1) is at a level in the leachate higher than the delisting level established in paragraph (1), or is at a level in the groundwater higher than the specific facility action levels, then MAX or the disposal facility must report such data, in writing, to the Regional Director of the Pennsylvania Department of Environmental Protection Southwest Region within 10 days of first possessing or being made aware of that data.

261a-7

(317317) No. 377 Apr. 06

25 § 261a.32**ENVIRONMENTAL PROTECTION**

Pt. I

*Facility**Address**Waste Description*

- (ii) Based on the information described in subparagraph (i) and any other information received from any source, the Regional Director will make a preliminary determination as to whether the reported information requires Department action to protect human health or the environment. Further action may include suspending or revoking the exclusion or other appropriate response necessary to protect human health and the environment.
- (iii) If the Regional Director determines that the reported information does require Department action, the Regional Director will notify MAX in writing of the actions the Regional Director believes are necessary to protect human health and the environment. The notice shall include a statement of the proposed action and a statement providing MAX and/or the approved disposal facility with an opportunity to present information as to why the proposed Department action is not necessary or to suggest an alternative action. MAX and/or the approved disposal facility shall have 30 days from the date of the Regional Director's notice to present the information.
- (iv) If after 30 days MAX and/or the approved disposal facility presents no further information, the Regional Director will issue a final written determination describing the Department actions that are necessary to protect human health or the environment. Any required action described in the Regional Director's determination shall become effective immediately, unless the Regional Director provides otherwise.

Authority

The provisions of this Appendix IXa issued under section 105(a) of the Solid Waste Management Act (35 P. S. § 6018.105(a)).

Source

The provisions of this Appendix IXa adopted February 10, 2006, effective February 11, 2006, 36 Pa.B. 705.

[Next page is 262-1.]

261a-8

(317318) No. 377 Apr. 06

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Ch. 262a

STANDARDS

25 § 262a.10

CHAPTER 262a. STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE

Subchap.	Sec.
A. GENERAL	262a.10
B. MANIFEST	262a.20
C. PRETRANSPORT REQUIREMENTS	262a.34
D. RECORDKEEPING AND REPORTING	262a.41
E. EXPORTS OF HAZARDOUS WASTE	262a.55
H. TRANSFRONTIER SHIPMENTS OF HAZARDOUS WASTE FOR RECOVERY WITHIN THE OECD	262a.80
I. SOURCE REDUCTION STRATEGY	262a.100

Authority

The provisions of this Chapter 262a issued under sections 105, 401—403 and 501 of the Solid Waste Management Act (35 P. S. §§ 6018.105, 6018.401—6018.403 and 6018.501); sections 105, 402 and 501 of The Clean Streams Law (35 P. S. §§ 691.105, 691.402 and 691.501); and section 1920-A of The Administrative Code of 1929 (71 P. S. § 510-20), unless otherwise noted.

Source

The provisions of this Chapter 262a adopted April 30, 1999, effective May 1, 1999, 29 Pa.B. 2367, unless otherwise noted.

Cross References

This chapter cited in 25 Pa. Code § 252.3 (relating to scope); 25 Pa. Code § 261a.7 (relating to residues of hazardous waste in empty containers); 25 Pa. Code § 266b.11 (relating to waste management for universal waste mercury-containing devices); 25 Pa. Code § 266b.31 (relating to waste management for universal waste mercury-containing devices); 25 Pa. Code § 270a.60 (relating to permits by rule); 25 Pa. Code § 272.541 (relating to basic requirements); 25 Pa. Code § 272.551 (relating to household hazardous waste transportation, storage and disposal; and 25 Pa. Code § 298.10 (relating to applicability).

Subchapter A. GENERAL

Sec.

262a.10. Incorporation by reference, purpose, scope and applicability.

262a.11. Hazardous waste determination.

262a.12. EPA identification numbers.

§ 262a.10. Incorporation by reference, purpose, scope and applicability.

Except as expressly provided in this chapter, 40 CFR Part 262 and its appendices (relating to standards applicable to generators of hazardous waste) are incorporated by reference. In 40 CFR 262.10(g) (relating to purpose, scope and applicability) the term “section 3008 of the act” is replaced with “Article VI of the Solid Waste Management Act (35 P. S. §§ 6018.601—6018.617).”

Cross References

This section cited in 25 Pa. Code § 272.541 (relating to collection contractor).

262a-1

(317319) No. 377 Apr. 06

25 § 262a.11**ENVIRONMENTAL PROTECTION**

Pt. I

§ 262a.11. Hazardous waste determination.

In addition to the requirements incorporated by reference, a determination that a waste is not hazardous under 40 CFR 262.11 (relating to hazardous waste determination) does not preclude the Department from determining the waste to be hazardous, using the characteristics and testing methods set forth in 40 CFR Part 261 (relating to identification and listing of hazardous waste).

Source

The provisions of this § 262a.11 adopted December 13, 2002, effective December 14, 2002, 32 Pa.B. 6102.

§ 262a.12. EPA identification numbers.

(a) Regarding the requirements incorporated by reference, the substitution of terms in § 260a.3 (relating to terminology and citations related to Federal regulations) does not apply to the incorporation by reference of 40 CFR 262.12 (relating to EPA identification numbers).

(b) In addition to the requirements incorporated by reference:

(1) A generator shall submit a subsequent notification to the Department if:

- (i) The generator activity moves to another location.
- (ii) The generator facility's designated contact person changes.
- (iii) The ownership of the generator facility changes.
- (iv) The type of regulated activity that takes place at the generator facility changes.
- (v) The generator's facility class changes, except when the facility class change is temporary.

(2) A generator shall offer a shipment of hazardous waste only to a transporter with a valid license issued by the Department.

Source

The provisions of this § 262a.12 amended December 13, 2002, effective December 14, 2002, 32 Pa.B. 6102. Immediately preceding text appears at serial page (284432).

Cross References

This section cited in 25 Pa. Code § 272.541 (relating to collection contractor).

Subchapter B. MANIFEST

Sec.

- 262a.20. General requirements.
- 262a.21. Acquisition of manifests.
- 262a.22. Number of copies.
- 262a.23. Use of the manifest.

262a-2

(317320) No. 377 Apr. 06

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Ch. 262a

STANDARDS

25 § 262a.20**§ 262a.20. General requirements.**

40 CFR 262.20 (b) and (c) (relating to general requirements) is not incorporated by reference. In addition to the requirements incorporated by reference, a generator shall:

- (1) Complete the manifest form in its entirety and distribute manifest copies in accordance with the instructions for the manifest, except that generators need not submit copies of manifests to the Department unless required by § 262a.23(a)(2) (relating to use of the manifest).
- (2) List no more than four waste streams on one manifest. If the generator is transporting or offering for transportation more than four different hazardous waste streams for offsite treatment, storage or disposal, the generator shall complete additional manifest forms for the remaining waste streams in the shipment, unless the waste stream is a lab pack.
- (3) Complete a continuation sheet, EPA Form 8700-22a, when there are more than two transporters, or for lab packs with more than four different waste streams in one shipment.
- (4) Ensure that the required information on all copies, including photocopies, of the manifest is legible to the Department, transporter and designated facility.
- (5) A generator shall designate only one permitted facility to handle the waste described on the manifest.

Source

The provisions of this § 262a.20 amended December 13, 2002, effective December 14, 2002, 32 Pa.B. 6102. Immediately preceding text appears at serial pages (284432) to (284433).

Cross References

This section cited in 25 Pa. Code § 263a.21 (relating to compliance with the manifest); and 25 Pa. Code § 270a.60 (relating to permits-by-rule).

§ 262a.21. Acquisition of manifests.

- (a) The substitution of terms in § 260a.3(a)(5) (relating to terminology and citations related to Federal regulations) does not apply to 40 CFR 262.21 (relating to acquisition of manifests).
- (b) In addition to the requirements incorporated by reference, a generator shipping hazardous waste to a facility in a state that does not require use of its own state manifest shall use the Department's manifest.

Source

The provisions of this § 262a.21 amended December 13, 2002, effective December 14, 2002, 32 Pa.B. 6102. Immediately preceding text appears at serial page (284433).

262a-3

(294489) No. 339 Feb. 03

25 § 262a.22**ENVIRONMENTAL PROTECTION**

Pt. I

§ 262a.22. Number of copies.

(a) 40 CFR 262.22 (relating to number of copies) is not incorporated by reference.

(b) The manifest shall consist of at least the number of copies which will provide the generator, each transporter and the owner or operator of the designated facility with one copy each for their records and which will allow the designated facility to send copies to the generator, generator state and destination state.

§ 262a.23. Use of the manifest.

(a) In addition to the requirements incorporated by reference:

(1) The generator shall print or type the generator's name and enter the date of shipment in the designated space on the manifest.

(2) If the out-of-State manifest does not include a generator-state copy to be submitted to the Department by the out-of-State designated facility, the generator shall submit a complete, legible copy, such as a photocopy, of the manifest as signed by the generator, all transporters and the designated facility. This copy shall be sent within 10 days of the generator's receipt of its signed copy from the designated facility.

(3) The generator shall obtain the printed or typed name of the transporter on the manifest.

(4) A generator may not use a hazardous waste manifest which has either a preprinted Manifest Document Number or preprinted Manifest Tracking Number that has been altered by anyone other than the printer of the manifest.

(b) The substitution of terms in § 260a.3(a)(5) (relating to terminology and citations related to Federal regulations) does not apply to 40 CFR 262.23(e) (relating to notification of shipments of hazardous waste to a facility in an authorized state which has not yet received authorization to regulate a newly designated hazardous waste).

Source

The provisions of this § 262a.23 amended December 13, 2002, effective December 14, 2002, 32 Pa.B. 6102. Immediately preceding text appears at serial page (284433).

Cross References

This section cited in 25 Pa. Code § 262a.20 (relating to general requirements).

Subchapter C. PRETRANSPORT REQUIREMENTS

Sec.
262a.34. Accumulation time.

262a-4

(294490) No. 339 Feb. 03

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Ch. 262a

STANDARDS

25 § 262a.34**§ 262a.34. Accumulation time.**

In addition to the requirements incorporated by reference, a generator who accumulates hazardous waste onsite as specified in 40 CFR 262.34(a)(1)(i) (relating to accumulation time) shall also comply with Chapter 265a, Subchapter I (relating to use and management of containers).

Source

The provisions of this § 262a.34 adopted December 13, 2002, effective December 14, 2002, 32 Pa.B. 6102.

Subchapter D. RECORDKEEPING AND REPORTING

Sec.

262a.41. Biennial report.

262a.42. Exception reporting.

262a.43. Additional reporting.

Cross References

This subchapter cited in 25 Pa. Code § 272.541 (relating to basic requirements).

§ 262a.41. Biennial report.

Regarding the requirements incorporated by reference, the following replaces the introductory paragraph in 40 CFR 262.41 (relating to biennial report):

A generator who ships hazardous waste offsite to a treatment, storage or disposal facility within the United States shall prepare and submit a single copy of a biennial report to the Department by March 1 of each even numbered year. The biennial report shall be submitted on EPA Form 8700—13A as modified by the Department, shall cover generator activities during the previous year and shall include the following information:

§ 262a.42. Exception reporting.

Regarding the requirements incorporated by reference, the phrase “for the region in which the generator is located” contained in 40 CFR 262.42 (relating to exception reporting) is not incorporated by reference.

§ 262a.43. Additional reporting.

In addition to the requirements incorporated by reference:

(1) Spills and discharges which are in amounts less than the reportable quantities, which do not result in discharges into waters of this Commonwealth, and which are managed according to an approved contingency plan, need not be reported.

(2) The reportable quantities are:

262a-5

(294491) No. 339 Feb. 03

25 § 262a.43**ENVIRONMENTAL PROTECTION**

Pt. I

(i) Liquid hazardous waste or liquids that become hazardous waste when spilled or discharged shall be reported to the Department when the quantity spilled or discharged equals or exceeds the reportable quantity for the waste contained in 40 CFR 302.4 (relating to designation of hazardous substances) or 10 gallons, whichever is more stringent. Liquids are flowable substances which contain less than 20% solids by dry weight. Flowable refers to flow in the sense of pourable as a liquid.

(ii) Solid hazardous waste or solids that become hazardous wastes when spilled or discharged shall be reported to the Department when the quantity spilled or discharged equals or exceeds the reportable quantity for the waste contained in 40 CFR 302.4 or 500 pounds, whichever is more stringent.

(3) A discharge or spill into waters of this Commonwealth shall be reported regardless of quantity spilled or discharged.

(4) In the event of a discharge or spill equal to or greater than the reportable quantity of hazardous waste or material that becomes a hazardous waste when spilled or discharged, the generator shall take appropriate immediate action to protect the health and safety of the public and the environment and immediately notify the Department by telephone at (800) 541-2050 with the following information:

- (i) The name of the person reporting the spill.
- (ii) The name and identification number of the generator.
- (iii) The phone number where the person reporting the spill can be reached.
- (iv) The date, time and location of the spill.
- (v) A brief description of the incident.
- (vi) For each material involved in the spill:
 - (A) The shipping name, hazard class and U.N. Number.
 - (B) The estimated quantity of material spilled.
- (vii) The extent of contamination of land, water or air, if known.

(5) If a discharge or spill of hazardous waste, or hazardous material that becomes a hazardous waste when spilled or discharged, occurs during onsite unloading, loading, storage or plan operation, and a Departmental official acting within the scope of his official responsibilities determines that immediate removal of the material is necessary to protect the health and safety of the public and the environment, that official may authorize in writing the removal of the material by transporters who do not have identification numbers or license and without the preparation of a manifest.

(6) A generator shall clean up a spill or discharge of hazardous waste, or material that becomes a hazardous waste when spilled or discharged, that occurs during onsite unloading, loading, storage or plan operation, and take actions that may be required or approved by the Department so that the discharge or spill no longer presents a hazard to the health and safety of the public or environment.

262a-6

(294492) No. 339 Feb. 03

Copyright © 2003 Commonwealth of Pennsylvania

Ch. 262a

STANDARDS

25 § 262a.50

(7) In addition, the generator shall file a written report on a spill or discharge of a reportable hazardous waste or material that becomes a hazardous waste when spilled or discharged, with the Department within 15 days after the incident, and supply the Department with other information it may require or request that pertains to the discharge. The report on the spill or discharge shall be entitled "Hazardous Waste Spill Report" and shall contain the following information:

- (i) The name, address and identification number of the generator and the date, time and location of the incident.
- (ii) A brief description of the circumstances causing the incident.
- (iii) A description of each of the hazardous wastes or materials that become hazardous wastes when spilled or discharged involved in the incident, including the estimated quantity spilled by weight or volume.
- (iv) A legible copy of the manifest document, if applicable.
- (v) A description of a contamination of land, water or air that has occurred due to the incident.
- (vi) A description of the actions the generator intends to take to prevent a similar occurrence in the future.

Source

The provisions of this § 262a.43 adopted December 13, 2002, effective December 14, 2002, 32 Pa.B. 6102.

Subchapter E. EXPORTS OF HAZARDOUS WASTE

Sec.

262a.50. Applicability

262a.55—262a.57. [Reserved].

§ 262a.50. Applicability.

Relative to the requirements incorporated by reference, the substitution of terms in § 260a.3 (relating to terminology and citations related to Federal regulations) does not apply to the incorporation by reference of 40 CFR Part 262, Subpart E (relating to exports of hazardous waste).

Source

The provisions of this § 262a.50 adopted December 13, 2002, effective December 14, 2002, 32 Pa.B. 6102.

§§ 262a.55—262a.57. [Reserved].**Source**

The provisions of these §§ 262a.55—262a.57 reserved December 13, 2002, effective December 14, 2002, 32 Pa.B. 6102. Immediately preceding text appears at serial page (284434).

262a-7

(294493) No. 339 Feb. 03

25 § 262a.80

ENVIRONMENTAL PROTECTION

Pt. I

**Subchapter H. TRANSFRONTIER SHIPMENTS OF
HAZARDOUS WASTE FOR RECOVERY WITHIN THE OECD**

Sec.
262a.80. Applicability.

§ 262a.80. Applicability.

Relative to the requirements incorporated by reference, the substitution of terms in § 260a.3 (relating to terminology and citations related to Federal regulations) does not apply to the incorporation by reference of 40 CFR Part 262, Subpart H (relating to transfrontier shipments of hazardous waste for recovery within the OECD).

Subchapter I. SOURCE REDUCTION STRATEGY

Sec.
262a.100. Source reduction strategy.

Cross References

This subchapter cited in 25 Pa. Code § 262a.34 (relating to accumulation time); and 25 Pa. Code § 272.541 (relating to collection contractor).

§ 262a.100. Source reduction strategy.

(a) By January 17, 1994, a person or municipality that generates hazardous waste shall prepare a source reduction strategy in accordance with this section. Except as otherwise provided in this article, the strategy shall be signed by the person or municipality that generated the waste, be maintained on the premises where the waste is generated, be available on the premises for inspection by any representative of the Department and be submitted to the Department upon request. The strategy may designate certain production processes as confidential. This confidential information may not be made public without the expressed written consent of the generator. Unauthorized disclosure is subject to appropriate penalties as provided by law.

(b) For each type of waste generated, the strategy shall include:

(1) A description of the source reduction activities conducted by the person or municipality in the 5 years prior to the date that the strategy is required to be prepared. The description shall quantify reductions in the weight or toxicity of waste generated on the premises.

(2) A statement of whether the person or municipality established a source reduction program. This program shall identify the methods and procedures that the person or municipality will implement to achieve a reduction in the weight or toxicity of waste generated on the premises, quantify the projected

262a-8

(294494) No. 339 Feb. 03

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Ch. 262a

STANDARDS

25 § 262a.100

reduction in weight or toxicity of waste to be achieved by each method or procedure and specify when each method or procedure will be implemented.

(3) If the person or municipality has not established a source reduction program as described in paragraph (2), it shall develop a strategy including the following:

- (i) A waste stream characterization, including source, hazards, chemical analyses, properties, generation rate, management techniques and management costs.
- (ii) A description of potential source reduction options.
- (iii) A description of how the options were evaluated.
- (iv) An explanation of why each option was not selected.

(c) The strategy required by this section shall be updated when either of the following occurs:

(1) There is a significant change in a type of waste generated on the premises or in the manufacturing process, other than a change described in the strategy as a source reduction method.

(2) Every 5 years, unless the Department establishes, in writing, a different period for the person or municipality that generated the waste.

(d) If hazardous waste generated by a person or municipality will be treated, stored or disposed of at a solid waste management facility which has applied to the Department for approval to treat, store or dispose of the waste, the person or municipality that generated the hazardous waste shall submit the source reduction strategy required by this section to the facility upon the request of the facility.

(e) This section does not apply to persons or municipalities that generate a total of less than 1,000 kilograms of hazardous waste in each month of the year.

(f) A person or municipality that generates hazardous waste may reference existing documents it has prepared to meet other waste minimization requirements to comply with this section, including those proposed to comply with 40 CFR 261.41(a)(5)—(7) (relating to biennial report).

262a-9

(294495) No. 339 Feb. 03

[Next page is 263-1.]

262a-10

(294496) No. 339 Feb. 03

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Ch. 298 MANAGEMENT OF WASTE OIL 25 § 298.1

CHAPTER 298. MANAGEMENT OF WASTE OIL

Subch.		Sec.
A.	GENERAL	298.1
B.	APPLICABILITY	298.10
C.	WASTE OIL GENERATORS	298.20
D.	WASTE OIL COLLECTION CENTERS AND AGGREGATION POINTS	298.30
E.	WASTE OIL TRANSPORTER AND TRANSFER FACILITIES	298.40
F.	WASTE OIL PROCESSING/REFINING FACILITIES	298.50
G.	WASTE OIL BURNERS WHO BURN OFF-SPECIFICATION WASTE OIL FOR ENERGY RECOVERY	298.60
H.	WASTE OIL FUEL MARKETERS	298.70

Authority

The provisions of this Chapter 298 issued under section 105(a) of the Solid Waste Management Act (35 P. S. § 6018.105(a)); sections 5(b) and 402 of The Clean Streams Law (35 P. S. §§ 691.5(b) and 691.402); section 302 of the Municipal Waste Planning, Recycling and Waste Reduction Act (53 P. S. § 4000.302); section 480(e) of the Pennsylvania Used Oil Recycling Act (58 P. S. § 480(e)); and sections 1905-A, 1917-A and 1920-A of The Administrative Code of 1929 (71 P. S. §§ 510-5, 510-17 and 510-20), unless otherwise noted.

Source

The provisions of this Chapter 298 adopted June 1, 2001, effective June 2, 2001, 31 Pa.B. 2873, unless otherwise noted.

Cross References

This chapter cited in 25 Pa. Code § 252.3 (relating to scope); 25 Pa. Code § 260a.3 (relating to terminology and citations related to Federal regulations); 25 Pa. Code § 261a.2 (relating to definition of "solid waste"); 25 Pa. Code § 261a.5 (relating to special requirements for hazardous waste generated by conditionally exempt small quantity generators); 25 Pa. Code § 261a.6 (relating to requirements for recyclable materials); and 25 Pa. Code § 266a.100 (relating to applicability).

Subchapter A. GENERAL

Sec.	
298.1.	Definitions.
298.2.	Scope.

§ 298.1. Definitions.

Terms defined in §§ 260a.1 and 260a.10 (relating to incorporation by reference, purpose, scope and applicability; and definitions) that are not defined in § 287.1 (relating to definitions) have the same meanings when used in this chapter. The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

Aboveground storage tank—A tank used to store or process waste oil that is not an underground storage tank.

298-1

(317371) No. 377 Apr. 06

25 § 298.1

ENVIRONMENTAL PROTECTION

Pt. I

Container—A portable device in which a material is stored, transported, treated, disposed of or otherwise handled.

Household “do-it-yourselfer” waste oil—Oil that is derived from households, such as waste oil generated by individuals who generate waste oil through the maintenance of their personal vehicles.

Household “do-it-yourselfer” waste oil generator—An individual who generates household “do-it-yourselfer” waste oil.

Petroleum refining facility—An establishment primarily engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils and lubricants, through fractionation, straight distillation of crude oil, redistillation of unfinished petroleum derivatives, cracking or other processes—for example, facilities classified as SIC 2911.

Rerefining distillation bottoms—The heavy fraction produced by vacuum distillation of filtered and dehydrated waste oil. The composition of still bottoms varies with column operation and feedstock.

Tank—A stationary device, designed to contain an accumulation of waste oil which is constructed primarily of nonearthen or nonwooden materials—for example, concrete, steel, plastic—which provides structural support.

Underground storage tank—An underground storage tank as defined in § 245.1 (relating to definitions).

Waste oil aggregation point—A site or facility that accepts, aggregates or stores waste oil collected only from other waste oil generation sites owned or operated by the owner or operator of the aggregation point, from which waste oil is transported to the aggregation point in shipments of no more than 55 gallons. Waste oil aggregation points may also accept waste oil from household do-it-yourselfers.

Waste oil burner—A facility where waste oil not meeting the specification requirements in § 298.11 (relating to waste oil specifications) is burned for energy recovery in devices identified in § 298.61(a) (relating to restrictions on burning).

Waste oil collection center—A site or facility that is registered, licensed, permitted and accepts, aggregates and stores waste oil collected from waste oil generators regulated under Subchapter C (relating to waste oil generators) who bring waste oil to the collection center in shipments of no more than 55 gallons under § 298.24 (relating to offsite shipments). Waste oil collection centers may also accept waste oil from household do-it-yourselfers.

Waste oil fuel marketer—A person who conducts one of the following activities:

- (i) Directs a shipment of off-specification waste oil from the person’s facility to a waste oil burner.
- (ii) First claims that waste oil that is to be burned for energy recovery meets the waste oil fuel specifications in § 298.11.

298-2

(317372) No. 377 Apr. 06

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Ch. 298

MANAGEMENT OF WASTE OIL

25 § 298.2

Waste oil generator—A person, by site, whose act or process produces waste oil or whose act first causes waste oil to become subject to this chapter.

Waste oil processing—Chemical or physical operations designed to produce from waste oil, or to make waste oil more amenable for production of, fuel oils, lubricants or other waste oil-derived products. Waste oil processing includes: blending waste oil with virgin petroleum products, blending waste oils to meet the fuel specification, filtration, simple distillation, chemical or physical separation and rerefining.

Waste oil processor/rerefiner—A facility that processes waste oil.

Waste oil transfer facility—A transportation related facility including loading docks, parking areas, storage areas and other areas where shipments of waste oil are received or held, or both, during the normal course of transportation.

Waste oil transporter—A person who transports waste oil and a person who collects waste oil from more than one generator and transports the collected oil. Transportation may include consolidation or aggregation of loads of waste oil on the vehicle or in transportation containers. Transporters may conduct incidental waste oil separation that occurs in the normal course of waste oil transportation—for example, settling and water separation.

§ 298.2. Scope.

(a) This chapter specifies general procedures and rules for persons or municipalities who generate, manage or handle waste oil that is being recycled.

(b) Waste oil that is being recycled shall be managed in accordance with this chapter.

Subchapter B. APPLICABILITY

Sec.

298.10. Applicability.

298.11. Waste oil specifications.

298.12. Prohibitions.

§ 298.10. Applicability.

(a) *Waste oil*. It is presumed that waste oil is to be recycled unless a waste oil handler disposes of waste oil, or sends waste oil for disposal. Except as provided in § 298.11 (relating to waste oil specifications), this chapter applies to waste oil and to materials identified in this section as being subject to regulation as waste oil whether or not the waste oil or material exhibits any characteristics of hazardous waste identified in 40 CFR Part 261, Subpart C (relating to characteristics of hazardous waste), incorporated by reference in § 261a.1 (relating to incorporation by reference, purpose and scope).

(b) *Mixtures of waste oil and hazardous waste*.

298-3

(280255) No. 321 Aug. 01

25 § 298.10**ENVIRONMENTAL PROTECTION****Pt. I****(1) *Listed hazardous waste.***

(i) *Mixtures of waste oil.* Mixtures of waste oil and hazardous waste that are listed in 40 CFR Part 261, Subpart D (relating to lists of hazardous waste), incorporated by reference in § 261a.1, are subject to regulation as hazardous waste under Chapters 260a—266a and Chapter 270a rather than as waste oil under this chapter.

(ii) *Rebuttable presumption for waste oil.* Waste oil containing more than 1,000 parts per million total halogens is presumed to be a hazardous waste. A person may rebut this presumption by demonstrating that the waste oil does not contain hazardous waste. For example, a person may use an analytical method from the current edition of SW-846 to show that the waste oil does not contain significant concentrations of halogenated hazardous constituents identified in 40 CFR Part 261, Appendix VIII (relating to hazardous constituents), incorporated by reference in § 261a.1. EPA publication SW-846, current edition, is available from the Government Printing Office, Superintendent of Documents, Post Office Box 371954, Pittsburgh, Pennsylvania 15250-7954, (202) 512-1800 (Document number 955-001-00000-1). Another way of rebutting this presumption is to demonstrate that the halogenated constituents are from wastes generated by households and, therefore, under 40 CFR 261.4(b)(1) (relating to exclusions), incorporated by reference in § 261a.1, are excluded from regulation as hazardous waste.

(A) The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins, if they are processed, through a tolling arrangement as described in § 298.24(c) (relating to offsite shipments), to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if the oils/fluids are recycled in another manner or disposed.

(B) The rebuttable presumption does not apply to waste oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption applies to waste oils contaminated with CFCs that have been mixed with waste oil from sources other than refrigeration units.

(2) *Characteristic hazardous waste.* A mixture of waste oil and hazardous waste that solely exhibits one or more of the hazardous waste characteristics identified in 40 CFR Part 261, Subpart C (relating to characteristics of hazardous waste), incorporated by reference in § 261a.1, and mixtures of waste oil and hazardous waste that is listed in 40 CFR Part 261, Subpart D (relating to lists of hazardous waste), incorporated by reference in § 261a.1, solely because it exhibits one or more of the characteristics of hazardous waste identified in 40 CFR Part 261, Subpart C (relating to characteristics of hazardous waste), incorporated by reference in § 261a.1, are subject to:

298-4

(280256) No. 321 Aug. 01

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Ch. 298

MANAGEMENT OF WASTE OIL

25 § 298.10

(i) Regulation as hazardous waste under Chapters 260a—270a, rather than as waste oil under this chapter, except as provided in subparagraphs (ii) and (iii).

(ii) Regulation as waste oil under this chapter if the mixture is of waste oil and a waste which is hazardous waste, mixed in accordance with § 270a.60(b)(2) (relating to permit-by-rule) or in accordance with a permitted hazardous waste treatment facility, and if the waste is hazardous solely because it exhibits the toxicity characteristic for benzene, arsenic, cadmium, chromium or lead or ignitability, provided that the resultant mixture does not exhibit any characteristic of hazardous waste identified under 40 CFR Part 261, Subpart C (relating to characteristics of hazardous waste) except as specified in subparagraph (iii).

(iii) Regulation as waste oil under this chapter if the mixture is of waste oil and a waste which is hazardous solely because it exhibits the characteristic of ignitability—for example, ignitable-only mineral spirits—if the resultant mixture does not exhibit the characteristic of ignitability under 40 CFR 261.21 (relating to characteristic of ignitability), incorporated by reference at § 261a.1. The hazardous waste, as well as the mixing of waste oil with a waste that is hazardous solely because it exhibits the characteristic of ignitability, shall be managed in accordance with this chapter.

(c) *Materials containing or otherwise contaminated with waste oil.*

(1) Except as provided in paragraph (2), materials containing or otherwise contaminated with waste oil from which the waste oil has been properly drained or removed to the extent possible so that no visible signs of free-flowing oil remain in or on the material:

(i) Are not waste oil and thus not subject to this chapter.

(ii) Are subject to regulation under Articles VII and VIII (relating to hazardous waste management; and municipal waste management) or this article.

(2) Materials containing or otherwise contaminated with waste oil that are burned for energy recovery are subject to regulation as waste oil under this chapter when burned at an industrial furnace or boiler.

(3) Waste oil drained or removed from materials containing or otherwise contaminated with waste oil is subject to regulation as waste oil under this chapter.

(4) Except as provided in paragraph (2) and subsection (f), wastewater contaminated with waste oil is managed under this chapter if it is demonstrated that one of the following applies:

(i) At least 1% of the wastewater is waste oil.

(ii) The wastewater contains marketable quantities of waste oil.

(d) *Mixtures of waste oil with products.*

(1) Except as provided in paragraph (2), mixtures of waste oil and fuels or other fuel products are subject to regulation as waste oil under this chapter.

298-5

(280257) No. 321 Aug. 01

25 § 298.10**ENVIRONMENTAL PROTECTION****Pt. I**

(2) A mixture of waste oil and diesel fuel mixed onsite by the generator of the waste oil for use in the generator's own vehicles is not subject to this chapter once the waste oil and diesel fuel have been mixed. Prior to mixing, the waste oil is subject to Subchapter C (relating to waste generators).

(e) *Materials derived from waste oil.*

(1) A material reclaimed from waste oil that is used beneficially and is not burned for energy recovery or used in a manner constituting disposal—for example, rerefined lubricants—may not be subject to this title if the Department determines that the material is no longer a waste in accordance with § 287.7 (relating to determination that a material is no longer a waste).

(2) A material produced from waste oil that is burned for energy recovery—for example, waste oil fuels—is subject to regulation as waste oil under this chapter.

(3) Except as provided in paragraph (4), a material derived from waste oil that is disposed or used in a manner constituting disposal is:

(i) Not waste oil and thus is not subject to this chapter.

(ii) A waste subject to regulation under Article VII or this article.

(4) Waste oil rerefining distillation bottoms that are used by the rerefiner as feedstock to manufacture asphalt products are not subject to this chapter.

(f) *Waste oil introduced into crude oil pipelines or a petroleum refining facility.*

(1) Waste oil mixed with crude oil or natural gas liquids—for example, in a production separator or crude oil stock tank—for insertion into a crude oil pipeline is exempt from this chapter. Waste oil is subject to this chapter prior to the mixing of waste oil with crude oil or natural gas liquids.

(2) A mixture of waste oil and crude oil or natural gas liquids containing less than 1% waste oil that is being stored or transported to a crude oil pipeline or petroleum refining facility for insertion into the refining process at a point prior to crude distillation or catalytic cracking is exempt under this chapter.

(3) Waste oil that is inserted into the petroleum refining facility process before crude distillation or catalytic cracking without prior mixing with crude oil is exempt from this chapter if the waste oil constitutes less than 1% of the crude oil feed to a petroleum refining facility process unit at any given time. Prior to insertion into the petroleum refining facility process, the waste oil is subject to this chapter.

(4) Except as provided in paragraph (5), waste oil that is introduced into a petroleum refining facility process after crude distillation or catalytic cracking is exempt from this chapter only if the waste oil meets the specification of § 298.11 (relating to waste oil specifications). Prior to insertion into the petroleum refining facility process, the waste oil is subject to this chapter.

(5) Waste oil that is incidentally captured by a hydrocarbon recovery system or wastewater treatment system as part of routine process operations at a petroleum refining facility and inserted into the petroleum refining facility pro-

298-6

(280258) No. 321 Aug. 01

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Ch. 298

MANAGEMENT OF WASTE OIL

25 § 298.11

cess is exempt from this chapter. This exemption does not extend to waste oil which is intentionally introduced into a hydrocarbon recovery system—for example, by pouring collected waste oil into the waste water treatment system.

(6) Tank bottoms from stock tanks containing exempt mixtures of waste oil and crude oil or natural gas liquids are exempt from this chapter.

(g) *Waste oil on vessels.* Waste oil produced on vessels from normal ship-board operations is not subject to this chapter until it is transported ashore.

(h) *Waste oil containing PCBs.* In addition to the requirements of this chapter, a marketer and burner of waste oil who markets waste oil containing a quantifiable level of PCBs is subject to 40 CFR 761.20(e) (relating to prohibitions and exceptions).

Cross References

This section cited in 25 Pa. Code § 298.20 (relating to applicability); 25 Pa. Code § 298.21 (relating to applicability); 25 Pa. Code § 298.24 (relating to offsite shipments); 25 Pa. Code § 298.40 (relating to applicability); 25 Pa. Code § 298.44 (relating to rebuttable presumption for waste oil and flash point screening); 25 Pa. Code § 298.46 (relating to tracking); 25 Pa. Code § 298.53 (relating to rebuttable presumption for waste oil and flash point screening); 25 Pa. Code § 298.59 (relating to management of waste); 25 Pa. Code § 298.63 (relating to rebuttable presumption for waste oil); and 25 Pa. Code § 298.67 (relating to management of waste).

§ 298.11. Waste oil specifications.

(a) Waste oil, and any fuel produced from waste oil by waste oil processing, blending or other treatment, to be burned for energy recovery either under this chapter or as specification fuel oil shall have at least 8,000 Btus per pound.

(b) Waste oil burned for energy recovery and fuel produced from waste oil by waste oil processing, blending or other treatment is subject to this chapter unless it is shown not to exceed any of the allowable levels of the constituents and properties in the specification shown in Table 1. Once waste oil that is to be burned for energy recovery has been shown not to exceed any specification and the person making that showing complies with §§ 298.72—298.74 (relating to on-specification waste oil fuel; notification; and tracking), the waste oil is no longer subject to this chapter. This waste oil is also known as on-specification fuel oil.

Table 1—Waste Oil Not Exceeding Any Specification Level Is Not Subject To This Chapter When Burned For Energy Recovery.¹

<i>Constituent/Property</i>	<i>Allowable Levels</i>
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Flash point	100°F minimum

298-7

(280259) No. 321 Aug. 01

25 § 298.12**ENVIRONMENTAL PROTECTION**

Pt. I

Constituent/Property Allowable Levels

Total halogens 1,000 ppm maximum for residential and commercial uses and 4,000 maximum for industrial uses.

¹ The specifications do not apply to mixtures of waste oil and hazardous waste that continue to be regulated as hazardous waste (see § 298.10(b) (relating to applicability)).

Cross References

This section cited in 25 Pa. Code § 261a.6 (relating to requirements for recyclable materials); 25 Pa. Code § 298.1 (relating to definitions); 25 Pa. Code § 298.10 (relating to applicability); 25 Pa. Code § 298.20 (relating to applicability); 25 Pa. Code § 298.40 (relating to applicability); 25 Pa. Code § 298.50 (relating to applicability); 25 Pa. Code § 298.60 (relating to applicability); 25 Pa. Code § 298.70 (relating to applicability); 25 Pa. Code § 298.72 (relating to on-specification waste oil fuel); and 25 Pa. Code § 298.74 (relating to tracking).

§ 298.12. Prohibitions.

(a) *Surface impoundment prohibition.* Waste oil may not be managed in surface impoundments or waste piles unless the units are subject to Chapter 264a or 265a (relating to owners and operators of hazardous waste treatment, storage and disposal facilities; and interim status standards for owners and operators of hazardous waste treatment, storage and disposal facilities).

(b) *Use as a dust suppressant.* The use of waste oil as a dust suppressant is prohibited.

(c) *Burning in particular units.* Off-specification waste oil fuel may be burned for energy recovery in only the following devices:

(1) An industrial furnace identified in 40 CFR 260.10 (relating to definitions), incorporated by reference in § 260a.1 (relating to incorporation by reference, purpose, scope and applicability).

(2) A boiler, as defined in 40 CFR 260.10, incorporated by reference in § 260a.1, that is identified as one of the following:

(i) An industrial boiler located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes.

(ii) A utility boiler used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale.

(iii) A waste oil-fired space heater if the burner meets the provisions of § 298.23 (relating to onsite burning in space heaters).

(3) A hazardous waste incinerator subject to 40 CFR Part 264, Subpart O (relating to incinerators), incorporated by reference in § 264a.1 (relating to incorporation by reference, purpose, scope and reference), or Chapter 265a.

298-8

(280260) No. 321 Aug. 01

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Ch. 298

MANAGEMENT OF WASTE OIL

25 § 298.20**Subchapter C. WASTE OIL GENERATORS**

- Sec.
 298.20. Applicability.
 298.21. Hazardous waste mixing.
 298.22. Waste oil storage.
 298.23. Onsite burning in space heaters.
 298.24. Offsite shipments.
 298.25. Source reduction strategy.
 298.26. Biennial report.

Cross References

This subchapter cited in 25 Pa. Code § 270a.60 (relating to permits-by-rule); 25 Pa. Code § 298.1 (relating to definitions); 25 Pa. Code § 298.30 (relating to waste oil collection centers); 25 Pa. Code § 298.40 (relating to applicability); 25 Pa. Code § 298.50 (relating to applicability); 25 Pa. Code § 298.60 (relating to applicability); and 25 Pa. Code § 298.70 (relating to applicability).

§ 298.20. Applicability.

(a) *General.* Except as provided in paragraphs (1)—(4), this subchapter applies to a waste oil generator. A waste oil generator is a person, by site, whose act or process produces waste oil or whose act first causes waste oil to become subject to regulation.

(1) *Household “do-it-yourselfer” waste oil generators.* A household “do-it-yourselfer” waste oil generator is not subject to this chapter.

(2) *Vessels.* A vessel at sea or at port is not subject to this subchapter. For purposes of this subchapter, waste oil produced on vessels from normal ship-board operations is considered to be generated at the time it is transported ashore. The owner or operator of the vessel and the person removing or accepting waste oil from the vessel are cogenerators of the waste oil and are both responsible for managing the waste in compliance with this subchapter once the waste oil is transported ashore. The cogenerators may decide among them which party will fulfill the requirements of this subchapter.

(3) *Diesel fuel.* A mixture of waste oil and diesel fuel mixed by the generator of the waste oil for use in the generator’s own vehicles is not subject to this chapter once the waste oil and diesel fuel have been mixed. Prior to mixing, the waste oil fuel is subject to this subchapter.

(4) *Farmers.* A farmer who generates an average of 25 gallons per month or less of waste oil from vehicles or machinery used on the farm in a calendar year is not subject to this chapter.

(b) *Other applicable provisions.* A waste oil generator who conducts the following activities is subject to the requirements of other applicable provisions of this chapter and other chapters as indicated in paragraphs (1)—(8):

298-9

(280261) No. 321 Aug. 01

25 § 298.20**ENVIRONMENTAL PROTECTION****Pt. I**

(1) A waste oil generator who transports waste oil, except under the self-transport provisions of § 298.24(1) and (2) (relating to offsite shipments), shall also comply with Subchapter E (relating to waste oil transporter and transfer facilities).

(2) Except as provided in paragraphs (3) and (4), a waste oil generator who processes or rerefines waste oil shall also comply with Subchapter F (relating to waste oil processing/refining facilities).

(3) A waste oil generator who performs the following activities is deemed to have a solid waste management permit-by-rule for the captive processing of waste oil provided that the waste oil is not being sent offsite to a burner of on-specification or off-specification waste oil fuel and provided that the generator submits a written notice to the Department that includes the name, address and telephone number of the facility, the individual responsible for operating the facility and a brief description of the facility. The Department may require a generator, who is conducting one of the activities in subparagraphs (i)—(iv) under a permit-by-rule, to apply for, and obtain, a permit in accordance with Chapters 287 and 297 (relating to residual waste management—general provisions; incinerators and other processing facilities), or take other appropriate action, when the generator is not in compliance with the requirements for the permit-by-rule or is conducting an activity that harms or presents a threat of harm to the health, safety or welfare of the people or the environment of this Commonwealth.

(i) Filtering, cleaning or otherwise reconditioning waste oil before it is reused by the generator. The generator shall also meet the following requirements:

(A) Remaining waste is managed under the act.

(B) Processing does not have an adverse effect on public health, safety, welfare or the environment.

(C) Processing occurs at the same manufacturing or production facility where some or all of the waste oil is generated.

(ii) Separating waste oil from wastewater generated onsite to make the wastewater acceptable for discharge or shipment offsite. For this activity to be authorized by a permit-by-rule, the generator shall also meet the following requirements:

(A) Processing occurs at the same manufacturing or production facility where some or all of the waste oil is generated.

(B) The facility has an NPDES permit, if required, and complies with the conditions of that permit.

(C) The facility meets the requirements of 40 CFR 264.11, 264.14, 264.15, 264.73, 264.75 and 264.77 all of which are incorporated by reference in § 264a.1 (relating to incorporation by reference, purpose, scope and reference).

298-10

(280262) No. 321 Aug. 01

Copyright © 2001 Commonwealth of Pennsylvania

Ch. 298

MANAGEMENT OF WASTE OIL

25 § 298.20

(D) The generator shall maintain, in a readily accessible place at the facility, a copy of a preparedness prevention and contingency (PPC) plan that is consistent with the Department's most recent guidelines for development and implementation of PPC plans.

(iii) Draining or otherwise removing waste oil from materials containing or otherwise contaminated with waste oil to remove excessive oil to the extent possible under § 298.10(c) (relating to applicability). For this activity to be authorized by a permit-by-rule, the generator shall also meet the following requirements:

(A) Waste remaining from the filter process is managed under the act.

(B) Processing does not have an adverse effect on public health, safety, welfare or the environment.

(C) Processing occurs at the same manufacturing or production facility where some or all of the waste oil is generated.

(iv) Filtering, separating or otherwise reconditioning waste oil before burning it in a space heater under § 298.23 (relating to onsite burning in space heaters). For this activity to be authorized by a permit-by-rule, the generator shall also meet the following requirements:

(A) Waste remaining from the filter process is managed under the act.

(B) Processing does not have an adverse effect on public health, safety, welfare or the environment.

(C) Processing occurs at the same manufacturing or production facility where some or all of the waste oil is generated.

(4) A waste oil generator is not a processor when it is using oil mist collectors to remove small droplets of waste oil from in-plant air to make plant air suitable for continued recirculation. For this exemption to be applicable, the waste oil so generated is not being sent offsite to a burner of on- or off-specification waste oil fuel.

(5) A waste oil generator who burns off-specification waste oil for energy recovery, except under the onsite space heater provisions of § 298.23, shall also comply with Subchapter G (relating to waste oil burners who burn off-specification waste oil for energy recovery).

(6) A waste oil generator who directs shipments of off-specification waste oil from its facility to a waste oil burner, or first claims that waste oil that is to be burned for energy recovery meets the waste oil fuel specifications in § 298.11 (relating to waste oil specifications) shall also comply with Subchapter H (relating to waste oil fuel marketers).

(7) A waste oil generator shall dispose of waste oil in accordance with Article VII or IX (relating to hazardous waste management; and residual waste management).

(8) A material managed in accordance with this section and that is not burned for energy recovery or used in a manner constituting disposal may not be subject to regulation under this title if the Department determines that the

298-11

(280263) No. 321 Aug. 01

25 § 298.21**ENVIRONMENTAL PROTECTION**

Pt. I

material is no longer a waste in accordance with § 287.7 (relating to determination that a material is no longer a waste).

(c) *Recordkeeping*. The generator is required to maintain, for 3 years, the following records:

- (1) The type of oil used.
- (2) A description of the process that generates the waste oil.
- (3) A record of the tests used to determine if the waste oil contains more than 1,000 parts per million total halogens.
- (4) A record of the information used to rebut the presumption in § 298.10(b)(1)(ii) if the waste oil contains more than 1,000 parts per million total halogens.
- (5) The type and quantity of any hazardous waste generated and the analyses of hazardous waste characteristics for any mixtures of hazardous waste with waste oil.

§ 298.21. Hazardous waste mixing.

(a) A mixture of waste oil and hazardous waste shall be managed in accordance with § 298.10(b) (relating to applicability).

(b) The rebuttable presumption for waste oil of § 298.10(b)(1)(ii) applies to waste oil managed by generators. Under the rebuttable presumption for waste oil of § 298.10(b)(1)(ii), waste oil containing greater than 1,000 parts per million total halogens is presumed to be a hazardous waste and shall be managed as hazardous waste and not as waste oil unless the presumption is rebutted. However, the rebuttable presumption does not apply to certain metalworking oils/fluids and certain waste oils removed from refrigeration units, as provided for in § 298.10(b)(1)(ii)(A) and (B).

(c) A generator shall perform a hazardous waste determination on any hazardous waste generated prior to mixing with waste oil and on the resultant mixture.

(d) If a generator rebuts the presumption in accordance with § 298.10(b)(1)(ii), the generator shall provide all information used to rebut the presumption to the transporter.

§ 298.22. Waste oil storage.

(a) *Storage units*. A waste oil generator may not store waste oil in units other than tanks, containers or units subject to regulation under Chapter 264a or 265a (relating to owners and operators of hazardous waste treatment, storage and disposal facilities; and interim status standards for owners and operators of hazardous waste treatment, storage and disposal facilities).

(b) *Condition of units*. A container or aboveground storage tank used to store waste oil at generator facilities shall meet the following requirements:

298-12

(280264) No. 321 Aug. 01

Copyright © 2001 Commonwealth of Pennsylvania

Ch. 298

MANAGEMENT OF WASTE OIL

25 § 298.22

(1) *Be in good condition.* For example, containers and aboveground storage tanks may not exhibit severe rusting, apparent structural defects or deterioration.

(2) *Not leaking (no visible leaks).*

(c) *Labels.*

(1) Except as provided in paragraphs (2) and (3), a container or aboveground storage tank used to store waste oil at generator facilities shall be labeled or marked clearly with the words “waste oil” by no later than December 2, 2001.

(2) Containers or aboveground storage tanks which are labeled or marked with the words “used oil” on June 2, 2001, shall be labeled or marked with the words “waste oil” by no later than June 2, 2003.

(3) Containers used in transportation may be labeled or marked with the words “used oil,” instead of “waste oil,” or the words required by a receiving state if the containers and vehicles are destined for recycling or disposal outside of this Commonwealth. If a person accepts waste oil from or delivers waste oil to a generator, transfer facility, or processor/rerefiner in this Commonwealth in a container used in transportation, paragraph (1) or (2) shall be met.

(4) Fill pipes used to transfer waste oil into underground storage tanks at generator facilities shall be labeled or marked clearly with the words “waste oil” by no later than December 2, 2001. Fill pipes which are labeled or marked with the words “used oil” on June 2, 2001, shall be labeled or marked with the words “waste oil” by no later than June 2, 2003.

(d) *Additional requirements for storage tanks.* Storage tanks used to store waste oil shall be designed and operated in accordance with § 299.122(b) and (c) (relating to storage tanks). For existing aboveground storage tanks, an alternative design to secondary containment may be demonstrated where the tank meets the ground.

(e) *Additional requirements for containers.* The total container height of a group of containers may not exceed 9 feet. The maximum width and depth of a group of containers shall provide a configuration and aisle space which ensures access for purposes of inspection, containment and remedial action with emergency vehicles and equipment.

(f) *Response to releases.* Upon detection of a release of waste oil to the environment not subject to Chapter 245, Subchapter D (relating to corrective action process for owners and operators of storage tanks and storage tank facilities and other responsible parties) which has occurred after June 2, 2001, a generator shall perform the following cleanup steps:

(1) Stop the release.

(2) Contain the released waste oil.

(3) Clean up and manage properly the released waste oil and other materials.

298-13

(280265) No. 321 Aug. 01

25 § 298.23**ENVIRONMENTAL PROTECTION****Pt. I**

(4) Repair or replace any leaking waste oil storage containers or tanks prior to returning them to service, if necessary.

(g) *Additional requirements.* In addition to the requirements of this subchapter, a waste oil generator shall maintain, in a readily accessible place at the facility, a copy of a preparedness, prevention and contingency (PPC) plan that is consistent with the Department's most recent guidelines for development and implementation of PPC plans. Waste oil generators are subject to the applicable spill prevention, control and countermeasures (40 CFR Part 112 (relating to oil pollution prevention)) in addition to the requirements of this subchapter. Waste oil generators are also subject to the underground storage tank standards in Chapter 245 (relating to administration of the storage tank and spill prevention program) for waste oil stored in underground storage tanks whether or not the waste oil exhibits any characteristics of hazardous waste.

§ 298.23. Onsite burning in space heaters.

A generator is deemed to have a solid waste management permit-by-rule to burn waste oil in waste oil-fired space heaters if the following apply:

- (1) The heater burns only waste oil that the owner or operator generates or waste oil received from household do-it-yourselfer waste oil generators.
- (2) The heater is designed to have a maximum capacity of not more than 0.5 million Btu per hour.
- (3) The combustion gases from the heater are vented to the ambient air.

Cross References

This section cited in 25 Pa. Code § 298.12 (relating to prohibitions); 25 Pa. Code § 298.20 (relating to applicability); 25 Pa. Code § 298.50 (relating to applicability); 25 Pa. Code § 298.60 (relating to applicability); and 25 Pa. Code § 298.61 (relating to restrictions on burning).

§ 298.24. Offsite shipments.

Except as provided in paragraphs (1)—(3), a generator shall ensure that waste oil is transported only by transporters who have obtained identification numbers. The generator shall provide the transporter with a certification that, except as provided for in § 298.10(b)(2)(ii) (relating to applicability), its waste oil has not been mixed with a hazardous waste.

(1) *Self-transportation of small amounts to approved collection centers.* Generators may transport, without an identification number, waste oil that is generated at the generator's site and waste oil collected from household do-it-yourselfers to a waste oil collection center if the following apply:

- (i) The generator transports the waste oil in a vehicle owned by the generator or owned by an employee of the generator.
- (ii) The generator transports no more than 55 gallons of waste oil at any time.

298-14

(280266) No. 321 Aug. 01

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Ch. 298

MANAGEMENT OF WASTE OIL

25 § 298.24

(iii) The generator transports the waste oil to a waste oil collection center that is one of the following:

(A) Operated in accordance with the requirements of Subchapter D (relating to waste oil collection centers and aggregation points) if the facility is located within this Commonwealth.

(B) Registered, licensed, permitted or recognized by a state/county/municipal government to manage waste oil if the facility is located outside this Commonwealth.

(iv) The generator shall provide the waste oil collection center with a certification that except as provided for in § 298.10(b)(2)(ii), the generator has not mixed its waste oil with hazardous waste.

(2) *Self-transportation of small amounts to aggregation points owned by the generator.* A generator may transport, without an identification number, waste oil that is generated at the generator's site to an aggregation point if the following apply:

(i) The generator transports the waste oil in a vehicle owned by the generator or owned by an employee of the generator.

(ii) The generator transports no more than 55 gallons of waste oil at any time.

(iii) The generator transports the waste oil to an aggregation point that is owned or operated, or both, by the same generator.

(3) *Tolling arrangements.* A waste oil generator may arrange for waste oil to be transported by a transporter without an identification number if the waste oil is reclaimed under a contractual agreement under which reclaimed oil is returned by the waste oil processor/rerefiner to the generator for use as a lubricant, cutting oil or coolant. The contract, known as a tolling arrangement, shall indicate the following:

(i) The type of waste oil and the frequency of shipments.

(ii) The vehicle used to transport the waste oil to the waste oil processing/rerefining facility and to deliver recycled waste oil back to the generator is owned and operated by the waste oil processor/rerefiner.

(iii) Reclaimed oil will be returned to the generator.

Cross References

This section cited in 25 Pa. Code § 298.1 (relating to definitions); 25 Pa. Code § 298.10 (relating to applicability); 25 Pa. Code § 298.20 (relating to applicability); 25 Pa. Code § 298.30 (relating to waste oil collection centers); 25 Pa. Code § 298.31 (relating to waste oil aggregation points owned by the generator); 25 Pa. Code § 298.40 (relating to applicability); 25 Pa. Code § 298.44 (relating to rebuttable presumption for waste oil and flash point screening); 25 Pa. Code § 298.50 (relating to applicability); and 25 Pa. Code § 298.63 (relating to rebuttable presumption for waste oil).

298-15

(280267) No. 321 Aug. 01

25 § 298.25

ENVIRONMENTAL PROTECTION

Pt. I

§ 298.25. Source reduction strategy.

A waste oil generator subject to this subchapter shall prepare a source reduction strategy in accordance with §§ 287.51, 287.53 and 287.54 (relating to scope; source reduction strategy; and chemical analysis of waste).

§ 298.26. Biennial report.

By March 1 of each odd numbered year a waste oil generator subject to this subchapter shall file a biennial report with the Department in accordance with §§ 287.51, 287.52 and 287.55 (relating to scope; biennial report; and retained recordkeeping).

Subchapter D. WASTE OIL COLLECTION CENTERS AND AGGREGATION POINTS

Sec.

298.30. Waste oil collection centers.

298.31. Waste oil aggregation points owned by the generator.

Cross References

This subchapter cited in 25 Pa. Code § 298.24 (relating to offsite shipments); and 25 Pa. Code § 298.4 (relating to offsite shipments).

§ 298.30. Waste oil collection centers.

(a) *Applicability.* This section applies to owners or operators of waste oil collection centers. A waste oil collection center is any site or facility that accepts/aggregates and stores waste oil collected from waste oil generators regulated under Subchapter C (relating to waste oil generators) who bring waste oil to the collection center in shipments of no more than 55 gallons under § 298.24(a) (relating to offsite shipments). Waste oil collection centers may also accept waste oil and oil filters from household do-it-yourselfers.

(b) *Permit-by-rule for waste oil collection centers.* For the operation of a waste oil collection center to be deemed to have a permit-by-rule, the owner or operator of a waste oil collection center shall do the following:

- (1) Be a state inspection facility, oil retailer, retail service station, a facility owned or operated by a municipality, municipal authority, or state agency, or a facility owned or operated by a nonprofit organization.
- (2) Not blend oil for offsite reuse.
- (3) Comply with the generator standards in Subchapter C.
- (4) Maintain on the premises waste oil collection tanks that are properly sheltered and protected to prevent spillage, seepage or discharge of the waste oil into the water, land and air of this Commonwealth and of sufficient size to handle returns of waste oil.

298-16

(280268) No. 321 Aug. 01

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Ch. 298

MANAGEMENT OF WASTE OIL

25 § 298.31

- (5) Have collection facilities for the safe and proper disposal of waste oil containers within a very close proximity to the collection tanks.
- (6) Not accept water, antifreeze, other residual or hazardous wastes or other contaminants.
- (7) Design, construct and operate the facility in a manner to ensure that any hazardous waste generated at the facility is not mixed with the waste oil being collected at the facility.
- (8) Have a procedure for ensuring that items in paragraph (6) are not collected at the facility and that if waste oil collected at the facility contains more than 1,000 parts per million total halogens it is due to the household do-it-yourselfer waste oil collected by the facility.

§ 298.31. Waste oil aggregation points owned by the generator.

(a) *Applicability.* This section applies to owners or operators of all waste oil aggregation points. A waste oil aggregation point is any site or facility that accepts, aggregates or stores waste oil collected only from other waste oil generation points owned or operated by the owner or operator of the aggregation point, from which waste oil is transported to the aggregation point in shipments of no more than 55 gallons under § 298.24(b) (relating to offsite shipments). Waste oil aggregation points may also accept waste oil from household do-it-yourselfers.

(b) *Permit-by-rule for waste oil aggregation points.* The owner or operator of an aggregation point may operate the aggregation point under a permit-by-rule. The Department may require the owner or operator of an aggregation point operated under a permit-by-rule to apply for and obtain a permit or take other appropriate action, when the generator is not in compliance with the requirements for the permit-by-rule or is conducting an activity that harms or presents a threat of harm to the health, safety or welfare of the people or the environment of this Commonwealth. For the operation of a waste oil aggregation point to be authorized by a permit-by-rule, the owner or operator shall:

- (1) Comply with the generator standards in Subchapter C (relating to waste oil generators).
- (2) Maintain on the premises waste oil collection tanks that are properly sheltered and protected to prevent spillage, seepage or discharge of the waste oil into the water, land and air of this Commonwealth and of sufficient size to handle returns of waste oil.
- (3) Have within a very close proximity to the collection tanks, collection facilities for the safe and proper disposal of waste oil containers.
- (4) Not accept water, antifreeze, other residual or hazardous wastes or other contaminants.
- (5) Submit a written notice to the Department that includes the name, address and the telephone number of the facility, the individual responsible for operating the facility and a brief description of the facility.

298-17

(280269) No. 321 Aug. 01

25 § 298.40**ENVIRONMENTAL PROTECTION****Pt. I****Subchapter E. WASTE OIL TRANSPORTER AND TRANSFER FACILITIES**

Sec.	
298.40.	Applicability.
298.41.	Restrictions on transporters and transfer facilities who are not also processors or refiners.
298.42.	Notification.
298.43.	Waste oil transportation.
298.44.	Rebuttable presumption for waste oil and flash point screening.
298.45.	Waste oil storage at transfer facility.
298.46.	Tracking.
298.47.	Management of wastes.
298.48.	Signs on vehicles.

Cross References

This subchapter cited in 25 Pa. Code § 298.20 (relating to applicability); 25 Pa. Code § 298.50 (relating to applicability); 25 Pa. Code § 298.60 (relating to applicability); and 25 Pa. Code § 298.70 (relating to applicability).

§ 298.40. Applicability.

(a) *General.* Except as provided in paragraphs (1)—(4), this subchapter applies to all waste oil transporters and transfer facilities.

(1) This subchapter does not apply to onsite transportation.

(2) This subchapter does not apply to a generator who transports shipments of waste oil totaling 55 gallons or less from the generator to a waste oil collection center as specified in § 298.24(a) (relating to offsite shipments).

(3) This subchapter does not apply to a generator who transports shipments of waste oil totaling 55 gallons or less from the generator to a waste oil aggregation point owned or operated by the same generator as specified in § 298.24(b).

(4) This subchapter does not apply to transportation of waste oil from household do-it-yourselfers to a regulated waste oil generator, collection center, aggregation point, transfer facility, processor/rerefiner or burner subject to this chapter. Except as provided in paragraphs (1)—(3), this subchapter does apply to transportation of collected household do-it-yourselfer waste oil from regulated waste oil generators, collection centers, aggregation points or other facilities where household do-it-yourselfer waste oil is collected.

(b) *Imports and exports.* A transporter who imports waste oil into or exports waste oil out of this Commonwealth is subject to this subchapter from the time the waste oil enters until the time it exits this Commonwealth.

(c) *Trucks used to transport hazardous waste.* Unless trucks previously used to transport hazardous waste are emptied as described in 40 CFR 261.7 (relating to residues of hazardous waste in empty containers) incorporated by reference in § 261a.1 (relating to incorporation by reference, purpose and scope), and modi-

298-18

(280270) No. 321 Aug. 01

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Ch. 298

MANAGEMENT OF WASTE OIL

25 § 298.41

fied in § 261a.7 (relating to residues of hazardous waste in empty containers) prior to transporting waste oil, the waste oil is considered to have been mixed with the hazardous waste and shall be managed as hazardous waste unless, under § 298.10(b)(2) (relating to applicability), the hazardous waste/waste oil mixture is determined not to exhibit the characteristic of ignitability.

(d) *Other applicable provisions.* A waste oil transporter or transfer facility that conducts the following activities is also subject to other applicable provisions of this chapter as indicated in paragraphs (1)—(5):

(1) A transporter or transfer facility that generates waste oil shall also comply with Subchapter C (relating to waste oil generators).

(2) A transporter or transfer facility that processes or rerefines waste oil, except as provided in § 298.41 (relating to restrictions on transporters and transfer facilities who are not also processors or rerefiners), shall also comply with Subchapter F (relating to waste oil processing/refining facilities).

(3) A transporter or transfer facility that burns off-specification waste oil for energy recovery shall also comply with Subchapter G (relating to waste oil burners who burn off-specification waste oil for energy recovery).

(4) A transporter or transfer facility that directs shipments of off-specification waste oil from its facility to a waste oil burner or first claims that waste oil that is to be burned for energy recovery meets the waste oil fuel specifications in § 298.11 (relating to waste oil specifications) shall also comply with Subchapter H (relating to waste oil fuel marketers).

(5) A transporter or transfer facility shall dispose of waste oil in accordance with Article VII or IX (relating to hazardous waste management; and residual waste management).

§ 298.41. Restrictions on transporters and transfer facilities who are not also processors or rerefiners.

(a) A waste oil transporter may, at a transfer facility authorized under § 298.45 (relating to waste oil storage at transfer facilities), consolidate or aggregate loads of waste oil for purposes of transportation. Except as provided in subsections (b) and (c), waste oil transporters may not process waste oil unless they also comply with the requirements for processors/rerefiners in Subchapter F (relating to waste oil processing/rerefining facilities).

(b) A transporter or transfer facility may conduct incidental waste oil processing operations that occur in the normal course of waste oil transportation—for example, settling and water separation that occurs in a transport vehicle or in a single consolidation tank—but that are not designed to produce (or make more amenable for production of) waste oil derived products unless they also comply with the processor/rerefiner requirements in Subchapter F.

(c) A transporter or transfer facility managing waste oil that is removed from oil bearing electrical transformers and turbines and filtered by the transporter in the course of loading or unloading waste oil or at a transfer facility authorized

298-19

(280271) No. 321 Aug. 01

25 § 298.42**ENVIRONMENTAL PROTECTION**

Pt. I

under § 298.45 prior to being returned to its original use is not subject to the waste oil processor/rerefiner requirements in Subchapter F.

Cross References

This section cited in 25 Pa. Code § 298.40 (relating to applicability); and 25 Pa. Code § 298.50 (relating to applicability).

§ 298.42. Notification.

(a) *Identification numbers.* A waste oil transporter or transfer facility shall have an EPA identification number.

(b) *Mechanics of notification.* A waste oil transporter or transfer facility that has not received an identification number may obtain one by notifying the EPA Region III Administrator of its waste oil activity by submitting one of the following:

- (1) A completed EPA form 8700-12. (To order information for EPA form 8700-12, call RCRA/Superfund hotline at (800) 424-9346 or (703) 920-9810.)
- (2) A letter requesting an identification number. Call RCRA/Superfund hotline to determine where to send a letter requesting an identification number. The letter should include the following information:
 - (i) The transporter or transfer facility company name.
 - (ii) The owner of the transporter or transfer facility company.
 - (iii) The mailing address for the transporter or transfer facility.
 - (iv) The name and telephone number for the transporter or transfer facility point of contact.
 - (v) The type of transport activity—for example, transport only, transport and transfer facility, transfer facility only.
 - (vi) The location of all transfer facilities at which waste oil is stored.
 - (vii) The name and telephone number for a contact at each transfer facility.

§ 298.43. Waste oil transportation.

(a) *Deliveries.* A waste oil transporter shall deliver all waste oil received to one of the following:

- (1) Another waste oil transporter, if the transporter has obtained an identification number.
- (2) A waste oil processing/rerefining facility who has obtained an identification number.
- (3) An off-specification waste oil burner facility who has obtained an identification number.
- (4) An on-specification waste oil burner facility.
- (5) A waste oil transfer facility that has obtained an identification number.

(b) *Department of Transportation requirements.* A waste oil transporter shall comply with the applicable requirements under the United States Department of

298-20

(280272) No. 321 Aug. 01

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Ch. 298

MANAGEMENT OF WASTE OIL

25 § 298.44

Transportation regulations in 49 CFR Parts 171—180. Persons transporting waste oil that meets the definition of a hazardous material in 49 CFR 171.8 (relating to definitions and abbreviations) shall comply with applicable regulations in 49 CFR Parts 171—180.

(c) *Waste oil discharges.*

(1) In the event of a discharge of waste oil during transportation, the transporter shall notify the appropriate Departmental office of emergency response and take appropriate immediate action to protect human health and the environment—for example, notify local authorities, dike the discharge area—and the like.

(2) If a discharge of waste oil occurs during transportation and the Department determines that immediate removal of the waste oil is necessary to protect human health or the environment, the Department may authorize the removal of the waste oil by transporters who do not have identification numbers.

(3) An air, rail, highway or water transporter who has discharged waste oil shall do the following:

(i) Give notice if required by 49 CFR 171.15 (relating to immediate notice of certain hazardous materials incidents) to the National Response Center (800) 424-8802 or (202) 426-2675).

(ii) Report in writing as required by 49 CFR 171.16 (relating to detailed hazardous materials incident reports) to the Director, Office of Hazardous Materials Regulations, Materials Transportation Bureau, Department of Transportation, Washington, D.C. 20590.

(4) A water transporter who has discharged waste oil shall give notice as required by 33 CFR 153.203 (relating to procedure for the notice of discharge).

(5) A transporter shall clean up any waste oil discharge that occurs during transportation or take action as required or approved by the Department so that the waste oil discharge no longer presents a hazard to human health or the environment.

§ 298.44. Rebuttable presumption for waste oil and flash point screening.

(a) To ensure that waste oil is not a hazardous waste under the rebuttable presumption of § 298.10(b)(1)(ii) (relating to applicability), the waste oil transporter and the transfer facility shall determine whether the total halogen content of waste oil being transported or stored at a transfer facility is above or below 1,000 parts per million. The waste oil transporter shall make the determination at the generator's location, prior to loading on the transportation vehicle. The waste oil transfer facility shall make the determination prior to the unloading of a transportation vehicle at the transfer facility.

(b) The transporter and transfer facility shall make this total halogen determination by:

(1) Testing the waste oil.

298-21

(317373) No. 377 Apr. 06

25 § 298.44**ENVIRONMENTAL PROTECTION****Pt. I**

(2) Applying knowledge of the halogen content of the waste oil in light of the materials or processes used.

(c) If the waste oil contains greater than or equal to 1,000 parts per million total halogens, it is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in 40 CFR Part 261, Subpart D (relating to lists of hazardous waste), incorporated by reference in § 261a.1 (relating to incorporation by reference, purpose and scope). The owner or operator may rebut the presumption by demonstrating that the waste oil does not contain hazardous waste. For example, by using an analytical method from SW-846, current edition, to show that the waste oil does not contain significant concentrations of halogenated hazardous constituents identified in 40 CFR Part 261, Appendix VIII (relating to hazardous constituents), incorporated by reference in § 261a.1. EPA publication SW-846, current edition, is available from the Government Printing Office, Superintendent of Documents, Post Office Box 371954, Pittsburgh, Pennsylvania 15250-7954, (202) 512-1800 (Document number 955-001-00000-1). Another way of rebutting this presumption is to demonstrate that the halogenated constituents are from wastes generated by households and therefore under 40 CFR 261.4(b)(1) (relating to exclusions), incorporated by reference in § 261a.1 are excluded from regulation as a hazardous waste.

(1) The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins, if they are processed, through a tolling arrangement as described in § 298.24(c) (relating to offsite shipments), to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if the oils/fluids are recycled in any other manner, or disposed.

(2) The rebuttable presumption does not apply to waste oils contaminated with CFCs removed from refrigeration units if the CFCs are destined for reclamation. The rebuttable presumption does apply to waste oils contaminated with CFCs that have been mixed with waste oil from sources other than refrigeration units.

(d) The owner or operator of a waste oil transfer facility shall test waste oil for flash point or shall request approval from the Department for an alternative method to screen waste oil for the purposes of detecting adulteration of waste oil and providing a safety measure in determining the potential for a waste oil to initiate a fire during storage and processing.

(e) Records of analyses conducted or information used to comply with subsections (a)—(d) shall be maintained by the transporter and transfer facility for at least 3 years.

Cross References

This section cited in 25 Pa. Code § 252.6 (relating to accreditation-by-rule); and 25 Pa. Code § 298.45 (relating to waste oil storage at transfer facility).

298-22

(317374) No. 377 Apr. 06

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Ch. 298

MANAGEMENT OF WASTE OIL

25 § 298.45

§ 298.45. Waste oil storage at transfer facility.

(a) *Applicability.* This section applies to a waste oil transfer facility. A waste oil transfer facility is a transportation related facility including loading docks, parking areas, storage areas and other areas where shipments of waste oil are received or held during normal course of transportation.

(b) *Permits.*

(1) The owners or operators of a transfer facility shall obtain a permit issued under Chapters 287 and 293 (relating to residual waste management—general provisions; and transfer facilities for residual waste).

(2) A general permit is only available if all of the following are met:

(i) The owner or operator of the waste oil transfer facility is responsible for transporting the waste oil from the generator to the transfer facility or the waste oil is from a household do-it-yourselfer waste oil generator.

(ii) The owner or operator of the waste oil transfer facility only:

(A) Consolidates/aggregates waste oil.

(B) Conducts incidental waste oil processing operations that occur in the normal course of waste oil transportation or in a single consolidation tank.

(3) The owners or operators of a waste oil transfer facility authorized prior to June 2, 2001 by a general permit issued prior to June 2, 2001, may continue to operate the facility under the general permit for the term of the permit. At the end of the permit term, this general permit is not renewable. The owner or operator of the transfer facility may only continue to operate the facility after the term has expired on the general permit if the owner or operator has obtained an individual permit issued under Chapters 287 and 293.

(4) A copy of the protocol for satisfying the requirements of § 298.44 (relating to rebuttable presumption for waste oil and flashpoint screening) shall be maintained at a facility operating under paragraph (2) or (3).

(c) *Storage units.* The owner or operator of a waste oil transfer facility may not store waste oil in units other than tanks, containers or units subject to regulation under Chapter 264a or 265a (relating to owners and operators of hazardous waste treatment, storage and disposal facilities; and interim status standards for owners and operators of hazardous waste treatment, storage and disposal facilities).

(d) *Condition of units.* A container or aboveground storage tank used to store waste oil at transfer facilities shall meet the following requirements:

(1) *Be in good condition.* For example—containers and aboveground storage tanks may not exhibit severe rusting, apparent structural defects or deterioration.

(2) *Not leaking (no visible leaks).*

(e) *Secondary containment for containers.* A container used to store waste oil at transfer facilities shall be equipped with a secondary containment system.

298-23

(280275) No. 321 Aug. 01

25 § 298.45**ENVIRONMENTAL PROTECTION****Pt. I**

(1) The secondary containment system shall consist of one of the following:

- (i) Dikes, berms or retaining walls and a floor. The floor shall cover the entire area within the dikes, berms or retaining walls.
- (ii) An equivalent secondary containment system.

(2) The entire containment system, including walls and floors, shall be sufficiently impervious to the migration of waste oil to prevent any waste oil released into the containment system from migrating out of the system to the soil, groundwater or surface water.

(f) *Additional requirements for containers.* The total container height of a group of containers may not exceed 9 feet. The maximum width and depth of a group of containers shall provide a configuration and aisle space which ensures access for purposes of inspection, containment and remedial action with emergency vehicles and equipment.

(g) *Additional requirements for storage tanks.* Storage tanks used to store waste oil shall be designed and operated in accordance with § 299.122(b) (relating to storage tanks). For existing aboveground storage tanks, an alternative design to secondary containment may be demonstrated where the tank meets the ground.

(h) *Labels.*

(1) Except as provided in paragraphs (2) and (3), a container or aboveground tank used to store waste oil at transfer facilities shall be labeled or marked clearly with the words "waste oil" by no later than December 2, 2001.

(2) Containers or aboveground storage tanks which are labeled or marked with the words "used oil" on June 2, 2001, shall be labeled or marked with the words "waste oil" by no later than June 2, 2003.

(3) Containers used in transportation may be labeled or marked with the words "used oil," instead of "waste oil," or the words required by a receiving state if the containers and vehicles are destined for recycling or disposal outside of this Commonwealth. If a person accepts waste oil from or delivers waste oil to a generator, transfer facility, or processor/rerefiner in this Commonwealth in a container used in transportation, paragraph (1) or (2) shall be met.

(4) Fill pipes used to transfer waste oil into underground storage tanks at transfer facilities shall be labeled or marked clearly with the words "waste oil" by no later than December 2, 2001. Fill pipes which are labeled or marked with the words "used oil" on June 2, 2001, shall be labeled or marked with the words "waste oil" by no later than June 2, 2003.

(i) *Response to releases.* Upon detection of a release of waste oil to the environment not subject to Chapter 245, Subchapter D (relating to corrective action process for owners and operators of storage tanks and storage tank

298-24

(280276) No. 321 Aug. 01

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Ch. 298

MANAGEMENT OF WASTE OIL

25 § 298.46

facilities and other responsible parties) which has occurred after June 2, 2001, the owner or operator of a transfer facility shall perform the following cleanup steps:

- (1) Stop the release.
- (2) Contain the released waste oil.
- (3) Clean up and manage properly the released waste oil and other materials.
- (4) If necessary, repair or replace any leaking waste oil storage containers or tanks prior to returning them to service.

(j) *Additional requirements.* In addition to the requirements of this subchapter, a waste oil transfer facility is subject to §§ 293.109 and 293.241—293.243. Waste oil transfer facilities are subject to all applicable spill prevention, control and countermeasures (40 CFR Part 112 (relating to oil pollution prevention)) in addition to the requirements of this subchapter. A waste oil transfer facility is also subject to the underground storage tank standards in Chapter 245 (relating to administration of the storage tank and spill prevention program) for waste oil stored in underground storage tanks whether or not the waste oil exhibits any characteristics of hazardous waste.

Cross References

This section cited in 25 Pa. Code § 298.41 (relating to restrictions on transporters and transfer facilities who are not also processors or refiners).

§ 298.46. Tracking.

(a) *Acceptance.* A waste oil transporter and transfer facility shall keep a record of each waste oil shipment accepted for transport. Records for each shipment shall include the following:

- (1) The name and address of the generator, transporter, transfer facility or processor/rerefiner who provided the waste oil for transport.
- (2) The identification number (if applicable) of the generator, transporter, transfer facility or processor/rerefiner who provided the waste oil for transport.
- (3) The quantity of waste oil accepted.
- (4) The date of acceptance.
- (5) The signature of a representative of the generator, transporter, transfer facility or processor/rerefiner who provided the waste oil for transport, dated upon receipt of the waste oil.

(b) *Deliveries.* A waste oil transporter and transfer facility shall keep a record of each shipment of waste oil that is delivered to another waste oil transporter, or to a waste oil burner, processor/rerefiner, transfer facility or disposal facility. Records of each delivery shall include the following:

- (1) The name and address of the receiving facility or transporter.
- (2) The identification number of the receiving facility or transporter.
- (3) The quantity of waste oil delivered.

298-25

(280277) No. 321 Aug. 01

25 § 298.47**ENVIRONMENTAL PROTECTION**

Pt. I

- (4) The date of delivery.
- (5) The signature, dated upon receipt of the waste oil, of a representative of the receiving facility or transporter.
- (6) An intermediate rail transporter is not required to sign the record of delivery.
- (c) *Exports of waste oil.* Waste oil transporters and transfer facilities must maintain the records described in subsection (b)(1)—(4) for each shipment of waste oil exported to a foreign country.
- (d) *Record retention.* The records described in subsections (a)—(c) shall be maintained for at least 3 years.

§ 298.47. Management of wastes.

A transporter or transfer facility who generates wastes from the storage or transport of waste oil shall manage the wastes as specified in § 298.10(e) (relating to applicability).

§ 298.48. Signs on vehicles.

- (a) A vehicle that is ordinarily or primarily used for the transportation of waste oil shall bear a sign that meets the following:
 - (1) The sign shall include the name and business address of the waste oil transporter that owns the vehicle.
 - (2) The sign shall have lettering that is 6 inches in height. The required information shall be clearly visible and easily readable.
- (b) Transportation vehicles may be labeled or marked with the words “used oil,” instead of “waste oil,” or the words required by a receiving state if the vehicles are destined for recycling or disposal outside of this Commonwealth. If a person accepts waste oil from or delivers waste oil to a generator, transfer facility, or processor/rerefiner in this Commonwealth in a transportation vehicle, the following shall be met:
 - (1) Except as provided in paragraph (2), the transportation vehicle shall be labeled or marked clearly with the words “waste oil” by no later than December 2, 2001.
 - (2) Transportation vehicles that are marked or labeled “used oil” on December 2, 2001, shall be marked or labeled with the words “waste oil” by no later than June 2, 2003.

Subchapter F. WASTE OIL PROCESSING/REFINING FACILITIES

- Sec.
- 298.50. Applicability.
- 298.51. Notification.
- 298.52. General facility standards.
- 298.53. Rebuttable presumption for waste oil and flash point screening.

298-26

(280278) No. 321 Aug. 01

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Ch. 298 MANAGEMENT OF WASTE OIL **25 § 298.50**

- 298.54. Waste oil management.
- 298.55. Analysis plan.
- 298.56. Tracking.
- 298.57. Operating record and reporting.
- 298.58. Offsite shipments of waste oil.
- 298.59. Management of waste.

Cross References

This subchapter cited in 25 Pa. Code § 298.20 (relating to applicability); 25 Pa. Code § 298.40 (relating to applicability); 25 Pa. Code § 298.41 (relating to restrictions on transporters and transfer facilities who are not also processor or rerefiners); 25 Pa. Code § 298.60 (relating to applicability); 25 Pa. Code § 298.61 (relating to restrictions on burning); and 25 Pa. Code § 298.70 (relating to applicability).

§ 298.50. Applicability.

(a) *General.* Except as provided in this subsection, this subchapter applies to owners and operators of waste oil processing/rerefining facilities. This subchapter does not apply to:

(1) A transporter or transfer facility that conducts incidental waste oil processing operations that occur during the normal course of transportation as provided in § 298.41 (relating to restrictions on transporters and transfer facilities who are not also processors or rerefiners).

(2) A burner that conducts incidental waste oil processing operations that occur during the normal course of waste oil management prior to burning as provided in § 298.61(b) (relating to restrictions on burning).

(b) *Other applicable provisions.* A waste oil processor/rerefiner who conducts the following activities is also subject to other applicable provisions of this chapter as indicated in paragraphs (1)—(5).

(1) A processor/rerefiner who generates waste oil shall also comply with Subchapter C (relating to waste oil generators).

(2) A processors/rerefiner who transports waste oil shall also comply with Subchapter E (relating to waste oil transporter and transfer facilities).

(3) Except as provided in subparagraphs (i) and (ii), a processor/rerefiner who burns off-specification waste oil for energy recovery shall also comply with Subchapter G (relating to waste oil burners who burn off-specification waste oil for energy necessary). A processor/rerefiner burning waste oil for energy recovery under the following conditions is not subject to Subchapter G.

(i) The waste oil is burned in an onsite space heater that meets the requirements of § 298.23 (relating to onsite burning in space heaters).

(ii) The waste oil is burned for purposes of waste oil processing which is considered burning incidentally to waste oil processing.

(4) A processor/rerefiner who directs shipments of off-specification waste oil from its facility to a waste oil burner or first claims that waste oil that is to be burned for energy recovery meets the waste oil fuel specifications in

298-27

(280279) No. 321 Aug. 01

25 § 298.51**ENVIRONMENTAL PROTECTION****Pt. I**

§ 298.11 (relating to waste oil specifications) shall also comply with Subchapter H (relating to waste oil fuel marketers).

(5) A processor/rerefiner shall dispose of waste oil in accordance with Article VII or IX (relating to hazardous waste management; and residual waste management).

(c) *Permits.*

(1) The owner or operator of a waste oil processing facility shall obtain a permit issued under Chapters 287 and 297 (relating to residual waste management—general provisions; and incinerators and other processing facilities).

(2) A general permit is only available for the following types of waste oil processing/rerefining facilities:

(i) A mobile waste oil processor/rerefiner that operates at the site of waste oil generation.

(ii) A waste oil processor/rerefiner that reclaims waste oil under toll arrangements as specified in § 298.24(3) (relating to offsite shipments).

(3) The owner or operator of a facility authorized prior to June 2, 2001, by a waste oil processing/rerefining general permit issued prior to June 2, 2001, may continue to operate its facility under the general permit for the permit term. At the end of the permit term, this general permit is not renewable. The owner or operator of the waste oil processing/rerefining facility after the term has expired on the general permit may only continue to operate the facility if the owner or operator has obtained an individual permit issued under Chapters 287 and 297.

§ 298.51. Notification.

(a) *Identification numbers.* A waste oil processor or rerefiner who has not previously obtained an identification number shall comply with 40 CFR 264.11 (relating to identification number), incorporated by reference in § 264a.1 (relating to incorporation by reference, purpose, scope and reference), and modified in § 264a.11 (relating to identification number and transporter license) and obtain an EPA identification number.

(b) *Mechanics of notification.* A waste oil processor or rerefiner who has not received an identification number may obtain one by notifying the regional administrator of the waste oil activity by submitting one of the following:

(1) A completed EPA form 8700-12 (to obtain EPA form 8700-12, call RCRA/Superfund hotline at (800) 424-9346 or (703) 920-9810).

(2) A letter requesting an identification number. Call RCRA/Superfund hotline to determine where to send a letter requesting an identification number. The letter should include the following information:

(i) The processor or rerefiner company name.

(ii) The owner of the processor or rerefiner company.

(iii) The mailing address for the processor or rerefiner.

298-28

(280280) No. 321 Aug. 01

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Ch. 298

MANAGEMENT OF WASTE OIL

25 § 298.52

- (iv) The name and telephone number for the processor or rerefiner point of contact.
- (v) The type of waste oil activity—for example, process only, process and rerefine.
- (vi) The location of the processor or rerefiner facility.

§ 298.52. General facility standards.

(a) *Preparedness and prevention.* The owner and operator of a waste oil processor or rerefiners facility shall comply with the following requirements:

(1) *Maintenance and operation of facility.* A facility shall be maintained and operated to minimize the possibility of a fire, explosion or any unplanned sudden or nonsudden release of waste oil to air, soil or surface water which could threaten human health or the environment.

(2) *Required equipment.* A facility shall be equipped with the following, unless none of the hazards posed by waste oil handled at the facility could require a particular kind of equipment specified in subparagraphs (i)—(iv):

(i) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel.

(ii) A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments or State or local emergency response teams.

(iii) A portable fire extinguisher, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas or dry chemicals), spill control equipment and decontamination equipment.

(iv) Water at adequate volume and pressure to supply water hose streams, foam producing equipment, or automatic sprinklers or water spray systems.

(3) *Testing and maintenance of equipment.* The facility communications or alarm systems, fire protection equipment, spill control equipment and decontamination equipment, when required, shall be tested and maintained as necessary to assure its proper operation in time of emergency.

(4) *Access to communications or alarm system.*

(i) Whenever waste oil is being poured, mixed, spread or otherwise handled, the personnel involved in the operation shall have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless the device is not required in paragraph (2).

(ii) When there is just one employee on the premises while the facility is operating, the employee shall have immediate access to a device, such as a telephone (immediately available at the scene of operation) or a hand-held two-way radio, capable of summoning external emergency assistance, unless the device is not required in paragraph (2).

298-29

(280281) No. 321 Aug. 01

25 § 298.52**ENVIRONMENTAL PROTECTION****Pt. I**

(5) *Required aisle space.* The owner or operator shall maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.

(6) *Arrangements with local authorities.*

(i) The owner or operator shall attempt to make the following arrangements, as appropriate, for the type of waste oil handled at the facility and the potential need for the services of these organizations:

(A) Arrangements to familiarize police, fire departments and emergency response teams with the layout of the facility, properties of waste oil handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility and possible evacuation routes.

(B) Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department and agreements with any others to provide support to the primary emergency authority.

(C) Agreements with State emergency response teams, emergency response contractors and equipment suppliers.

(ii) Arrangements to familiarize local hospitals with the properties of waste oil handled at the facility and the types of injuries or illnesses which could result from fires, explosions or releases at the facility.

(iii) If State or local authorities decline to enter into these arrangements, the owner or operator shall document the refusal in the operating record.

(b) *Contingency plan and emergency procedures.* Owners and operators of waste oil processing and rerefining facilities shall comply with the following requirements:

(1) *Purpose and implementation of contingency plan.*

(i) Each owner or operator shall have a contingency plan for the facility. The contingency plan shall be designed to minimize hazards to human health or the environment from fires, explosions or any unplanned sudden or nonsudden release of waste oil to air, soil or surface water.

(ii) The provisions of the plan shall be carried out immediately whenever there is a fire, explosion or release of waste oil which could threaten human health or the environment.

(2) *Content of contingency plan.*

(i) The contingency plan shall describe the actions facility personnel shall take to comply with paragraphs (1) and (6) in response to fires, explosions or any unplanned sudden or nonsudden release of waste oil to air, soil or surface water at the facility.

(ii) If the owner or operator has already complied with 40 CFR Part 264, Subparts C and D (relating to preparedness and prevention; and contin-

298-30

(280282) No. 321 Aug. 01

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Ch. 298

MANAGEMENT OF WASTE OIL

25 § 298.52

gency plan and emergency procedures), incorporated by reference in § 264a.1 (relating to incorporation by reference, purpose, scope and reference), and modified in § 264a.56 (relating to emergency procedures) or has already prepared some other emergency or contingency plan, the owner or operator need only amend that plan to incorporate waste oil management provisions that are sufficient to comply with this chapter.

(iii) The plan shall describe arrangements agreed to by local police departments, fire departments, hospitals, contractors and State and local emergency response teams to coordinate emergency services, under subsection (a)(6).

(iv) The plan shall list names, addresses and the office and home phone numbers of the persons qualified to act as emergency coordinators, as described in paragraph (5), and this list shall be kept up to date. If more than one person is listed, one person shall be named as primary emergency coordinator and the others shall be listed in the order in which they will assume responsibility as alternates.

(v) The plan shall include a list of all emergency equipment at the facility—such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external) and decontamination equipment—if this equipment is required. This list shall be kept up to date. In addition, the plan shall include the location and a physical description of each item on the list, and a brief outline of its capabilities.

(vi) The plan shall include an evacuation plan for facility personnel if there is a possibility that evacuation could be necessary. This plan shall describe signals to be used to begin evacuation, evacuation routes and alternate evacuation routes, in cases where the primary routes could be blocked by releases of waste oil or fires.

(3) *Copies of contingency plan.* A copy of the contingency plan and revisions to the plan shall be:

(i) Maintained at the facility.

(ii) Submitted to all local police departments, fire departments, hospitals and State and local emergency response teams that may be called upon to provide emergency services.

(4) *Amendment of contingency plan.* The contingency plan shall be reviewed and immediately amended, if necessary, whenever:

(i) Applicable regulations are revised.

(ii) The plan fails in an emergency.

(iii) The facility changes in its design, construction, operation, maintenance or other circumstances in a way that materially increases the potential for fires, explosions or releases of waste oil, or changes the response necessary in an emergency.

(iv) The list of emergency coordinators changes.

(v) The list of emergency equipment changes.

298-31

(280283) No. 321 Aug. 01

25 § 298.52

ENVIRONMENTAL PROTECTION

Pt. I

(5) *Emergency coordinator.* At all times, there shall be at least one employe either on the facility premises or on call—for example, available to respond to an emergency by reaching the facility within a short period of time—with the responsibility for coordinating all emergency response measures. This emergency coordinator shall be thoroughly familiar with all aspects of the facility's contingency plan, the operations and activities at the facility, the location and characteristic of waste oil handled, the location of all records within the facility and facility layout. In addition, this person shall have the authority to commit the resources needed to carry out the contingency plan.

(6) *Emergency procedures.*

(i) Whenever there is an imminent or actual emergency situation, the emergency coordinator, or the designee when the emergency coordinator is on call, shall immediately do the following:

(A) Activate internal facility alarms or communication systems, if applicable, to notify all facility personnel.

(B) Notify appropriate State or local agencies with designated response roles if their help is needed.

(ii) Whenever there is a release, fire or explosion, the emergency coordinator shall immediately identify the character, exact source, amount and real extent of any released materials. The emergency coordinator may do this by observation or review of facility records of manifests and, if necessary, by chemical analysis.

(iii) Concurrently, the emergency coordinator shall assess possible hazards to human health or the environment that may result from the release, fire or explosion. This assessment shall consider both direct and indirect effects of the release, fire or explosion—for example, the effects of any toxic, irritating or asphyxiating gases that are generated or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions.

(iv) If the emergency coordinator determines that the facility has had a release, fire or explosion which could threaten human health or the environment, outside the facility, the emergency coordinator shall report the findings as follows:

(A) If the assessment indicated that evacuation of local areas may be advisable, the emergency coordinator shall immediately notify the appropriate Departmental office of emergency response and the appropriate local authorities. The emergency coordinator shall be available to help appropriate officials decide whether local areas should be evacuated.

(B) The emergency coordinator shall immediately notify either the government official designated as the on-scene coordinator for the geographical area in the applicable regional contingency plan or the National Response Center (using the 24-hour toll free number (800) 424-8802). The report shall include:

298-32

(280284) No. 321 Aug. 01

Copyright © 2001 Commonwealth of Pennsylvania

Ch. 298

MANAGEMENT OF WASTE OIL

25 § 298.52

- (1) The name and telephone number of reporter.
- (2) The name and address of the facility.
- (3) The time and type of incident-for example, release or fire.
- (4) The name and quantity of materials involved, to the extent known.
- (5) The extent of injuries, if any.
- (6) The possible hazards to human health, or the environment, outside the facility.

(v) During an emergency, the emergency coordinator shall take all reasonable measures necessary to ensure that fires, explosions and releases do not occur, recur or spread to other waste oil or hazardous waste at the facility. These measures shall include, if applicable, stopping processes and operation, collecting and containing released waste oil, and removing or isolating containers.

(vi) If the facility stops operation in response to a fire, explosion or release, the emergency coordinator shall monitor for leaks, pressure buildup, gas generation or ruptures in valves, pipes or other equipment, wherever this is appropriate.

(vii) Immediately after an emergency, the emergency coordinator shall provide for recycling, storing or disposing of recovered waste oil, contaminated soil or surface water, or any other material that results from a release, fire or explosion at the facility.

(viii) The emergency coordinator shall ensure that, in the affected areas of the facility, the following conditions apply:

(A) No waste or waste oil that may be incompatible with the released material is recycled, treated, stored or disposed of until cleanup procedures are completed.

(B) The emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

(C) The owner or operator shall notify the Department and applicable local authorities that the facility is in compliance with clauses (A) and (B) before operations are resumed in the affected areas of the facility.

(ix) The owner or operator shall note in the operating record the time, date and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, the owner or operator shall submit a written report on the incident to the Department. The report shall include the following:

(A) The name, address and telephone number of the owner or operator.

(B) The name, address and telephone number of the facility.

(C) The date, time and type of incident-for example, fire or explosion.

(D) The name and quantity of materials involved.

(E) The extent of injuries, if any.

298-33

(280285) No. 321 Aug. 01

25 § 298.53**ENVIRONMENTAL PROTECTION**

Pt. I

(F) An assessment of actual or potential hazards to human health or the environment, if applicable.

(G) An estimated quantity and disposition of recovered material that resulted from the incident.

Cross References

This section cited in 25 Pa. Code § 298.57 (relating to operating record and reporting).

§ 298.53. Rebuttable presumption for waste oil and flash point screening.

(a) To ensure that waste oil managed at a waste oil processing/rerefining facility is not hazardous waste under the rebuttable presumption of § 298.10(b)(1)(ii) (relating to applicability), the owner or operator of a waste oil processing/rerefining facility shall determine whether the total halogen content of waste oil managed at the facility is above or below 1,000 parts per million. The waste oil processing/rerefining facility shall make the determination prior to the unloading of a transportation vehicle at the processing/rerefining facility.

(b) The owner or operator shall make this total halogen determination by either:

(1) Testing the waste oil.

(2) Applying knowledge of the halogen content of the waste oil in light of the materials or processes used.

(c) Waste oil containing more than 1,000 parts per million total halogens, is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in 40 CFR Part 261, Subpart D (relating to lists of hazardous waste), incorporated by reference in § 261a.1 (relating to incorporation by reference, purpose and scope). Persons may rebut this presumption by demonstrating that the waste oil does not contain hazardous waste. For example, by using an analytical method from the current edition of SW-846 to show that the waste oil does not contain significant concentrations of halogenated hazardous constituents identified in 40 CFR Part 251, Appendix VIII (relating to hazardous constituents), incorporated by reference in § 261a.1. EPA publication SW-846, current edition, is available from the Government Printing Office, Superintendent of Documents, Post Office Box 371954, Pittsburgh, Pennsylvania 15250-7954, (202) 512-1800 (Document number 955-001-00000-1). Another way of rebutting this presumption is to demonstrate that the halogenated constituents are from wastes generated by households and therefore under 40 CFR 261.4(b)(1) (relating to exclusions), incorporated by reference in § 261a.1 are excluded from regulation as hazardous waste.

(1) The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins, if they are processed, through a tolling agreement, to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if the oils/fluids are recycled in any other manner, or disposed.

298-34

(280286) No. 321 Aug. 01

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Ch. 298

MANAGEMENT OF WASTE OIL

25 § 298.54

(2) The rebuttable presumption does not apply to waste oils contaminated with CFCs removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to waste oils contaminated with CFCs that have been mixed with waste oil from sources other than refrigeration units.

(d) The owner or operator of a waste oil processing/refining facility shall test waste oil for flash point or shall request approval from the Department for an alternative method to screen waste oil for the purposes of detecting adulteration of waste oil and providing a safety measure in determining the potential for a waste oil to initiate a fire during storage and processing.

Cross References

This section cited in 25 Pa. Code § 298.55 (relating to analysis plan).

§ 298.54. Waste oil management.

(a) *Management units.* Waste oil processor/rerefiners may not store waste oil in units other than tanks, containers, or units subject to regulation under Chapters 264a or 265a (relating to owners and operators of hazardous waste treatment, storage and disposal facilities; and interim status standards for owners and operators of hazardous waste treatment, storage and disposal facilities).

(b) *Condition of units.* A container or aboveground tank used to store or process waste oil at waste oil processing and rerefining facilities shall meet the following conditions:

(1) *Be in good condition.* For example, containers and aboveground storage tanks may not exhibit severe rusting, apparent structural defects or deterioration.

(2) *Not leaking (no visible leaks).*

(c) *Secondary containment for containers.* A container used to store or process waste oil at waste oil processing and rerefining facilities shall be equipped with a secondary containment system.

(1) The secondary containment system shall consist of one of the following:

(i) Dikes, berms or retaining walls and a floor. The floor shall cover the entire area within the dike, berm or retaining wall.

(ii) An equivalent secondary containment system.

(2) The entire containment system, including walls and floor, shall be sufficiently impervious to the migration of waste oil to prevent any waste oil released into the containment system from migrating out of the system to the soil, groundwater or surface water.

(d) *Additional requirements for containers.* The total container height of a group of containers may not exceed 9 feet. The maximum width and depth of a group of containers shall provide a configuration and aisle space which ensures

298-35

(280287) No. 321 Aug. 01

25 § 298.54**ENVIRONMENTAL PROTECTION****Pt. I**

access for purposes of inspection, containment and remedial action with emergency vehicles and equipment.

(e) *Additional requirements for storage tanks.* Storage tanks used to store waste oil shall be designed and operated in accordance with § 299.122(b) (relating to storage tanks). For existing aboveground storage tanks, an alternative design to secondary containment may be demonstrated where the tank meets the ground.

(f) *Labels.*

(1) Except as provided in paragraphs (2) and (3), a container or aboveground tank used to store waste oil at processing and rerefining facilities shall be labeled or marked clearly with the words "waste oil" by no later than December 2, 2001.

(2) Containers or aboveground storage tanks which are labeled or marked with the words "used oil" on June 2, 2001, shall be labeled or marked with the words "waste oil" by no later than June 2, 2003.

(3) Containers used in transportation may be labeled or marked with the words "used oil," instead of "waste oil," or the words required by a receiving state if the containers and vehicles are destined for recycling or disposal outside of this Commonwealth. If a person accepts waste oil from or delivers waste oil to a generator, transfer facility, or processor/rerefiner in Pennsylvania in a container used in transportation, paragraph (1) or (2) shall be met.

(4) Fill pipes used to transfer waste oil into underground storage tanks at processing or rerefining facilities shall be labeled or marked clearly with the words "waste oil" by no later than December 2, 2001. Fill pipes which are labeled or marked with the words "used oil" on June 2, 2001, shall be labeled or marked with the words "waste oil" by no later than June 2, 2003.

(g) *Response to releases.* Upon detection of a release of waste oil to the environment not subject to Chapter 245, Subchapter D (relating to corrective action process for owners and operators of storage tanks and storage tank facilities and other responsible parties) which has occurred after June 2, 2001. An owner or operator shall perform the following cleanup steps:

(1) Stop the release.

(2) Contain the released waste oil.

(3) Clean up and properly manage the released waste oil and other materials.

(4) If necessary, repair or replace any leaking waste oil storage containers or tanks prior to returning them to service.

(h) *Closure.*

(1) *Aboveground storage tanks.* The owner and operator who stores or processes waste oil in an aboveground tank shall comply with the following requirements:

(i) At closure of a tank system, the owner or operator shall remove or decontaminate waste oil residues in tanks, contaminated containment system

298-36

(280288) No. 321 Aug. 01

Copyright © 2001 Commonwealth of Pennsylvania

Ch. 298

MANAGEMENT OF WASTE OIL

25 § 298.55

components, contaminated soils and structures and equipment contaminated with waste oil, and manage them as hazardous waste, unless the materials are not hazardous waste under this chapter.

(ii) If the owner or operator demonstrates that not all contaminated soils can be practicably removed or decontaminated as required in subsection (i)(1)(i), the owner or operator shall close the tank system and perform post-closure care in accordance with the closure and postclosure care requirements that apply to hazardous waste landfills. (See 40 CFR 265.310 (relating to closure and post-closure care), incorporated by reference in § 265a.1 (relating to incorporation by reference, purpose, scope and applicability).

(2) *Containers.* An owner or operator who store waste oil in containers shall comply with the following requirements:

(i) At closure, containers holding waste oils or residues of waste oil shall be removed from the site.

(ii) The owner or operator shall remove or decontaminate waste oil residues, contaminated containment system components, contaminated soils and structures and equipment contaminated with waste oil, and manage them as hazardous waste, unless the materials are not hazardous waste under Chapter 261a (relating to identification and listing of hazardous waste).

(i) *Additional requirements.* In addition to the requirements of this subchapter, waste oil processor/rerefiners are subject to all applicable spill prevention, control and countermeasures (40 CFR Part 112), 40 CFR Part 264, Subparts C and D (relating to preparedness and prevention; and contingency plan and emergency procedures), incorporated by reference in § 264a.1 (relating to incorporation by reference, purpose, scope and reference), and modified in § 264a.56 (relating to emergency procedures). In addition to the requirements of this subchapter, a waste oil processor/rerefiner is also subject to the underground storage tank standards in Chapter 245 (relating to administration of the storage tank and spill prevention program) for waste oil stored in underground storage tanks whether or not the waste oil exhibits any characteristics of hazardous waste, in addition to the requirements of this subchapter.

§ 298.55. Analysis plan.

The owner or operator of a waste oil processing or rerefining facility shall develop and follow a written analysis plan describing the procedures that will be used to comply with the analysis requirements of § 298.53 (relating to rebuttable presumption for waste oil and flashpoint screening) and, if applicable, § 298.72 (relating to on-specification waste oil fuel). The owner or operator shall keep the plan at the facility.

(1) *Rebuttable presumption for waste oil and flash point screening in § 298.53.* At a minimum, the plan shall specify the following:

298-37

(287255) No. 330 May 02

25 § 298.56**ENVIRONMENTAL PROTECTION**

Pt. I

- (i) Whether sample analyses or knowledge of the halogen content of the waste oil will be used to make this determination.
 - (ii) If sample analyses are used to make this determination:
 - (A) The sampling method used to obtain representative samples to be analyzed. A representative sample may be obtained using either:
 - (I) One of the sampling methods in 40 CFR Part 261, Appendix I (relating to representative sampling methods) incorporated by reference in § 261a.1 (relating to incorporation by reference, purpose and scope).
 - (II) A method shown to be equivalent under 40 CFR 260.20 and 260.21 (relating to general; and petitions for equivalent testing or analytical methods), incorporated by reference in § 260a.1 (relating to incorporated by reference, purpose, scope and applicability).
 - (B) The frequency of sampling to be performed, and whether the analysis will be performed onsite or offsite.
 - (C) The methods used to analyze waste oil for the parameters specified in § 298.53.
 - (iii) The type of information that will be used to determine the halogen content of the waste oil.
- (2) *On-specification waste oil fuel in § 298.72.* At a minimum, the plan shall specify the following if § 298.72 applies:
- (i) Whether sample analyses or other information will be used to make this determination.
 - (ii) If sample analyses are used to make this determination:
 - (A) The sampling method used to obtain representative samples to be analyzed. A representative sample may be obtained using one of the following:
 - (I) One of the sampling methods in 40 CFR Part 261, Appendix I, incorporated by reference in § 261a.1.
 - (II) A method shown to be equivalent under 40 CFR 260.20 and 260.21 incorporated by reference in § 260a.1.
 - (B) Whether waste oil will be sampled and analyzed prior to or after any waste oil processing/rerefining.
 - (C) The frequency of sampling to be performed and whether the analysis will be performed onsite or offsite.
 - (D) The methods used to analyze waste oil for the parameters specified in § 298.72.
 - (iii) The type of information that will be used to make the on-specification waste oil fuel determination.

§ 298.56. Tracking.

- (a) *Acceptance.* A waste oil processor/rerefiner shall keep a record of each waste oil shipment accepted for waste oil processing/rerefining. These records

298-38

(287256) No. 330 May 02

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Ch. 298

MANAGEMENT OF WASTE OIL

25 § 298.57

may take the form of a log, invoice, manifest, bill of lading or other shipping documents. Records for each shipment shall include the following information:

- (1) The name and address of the transporter who delivered the waste oil to the processor/rerefiner.
- (2) The name and address of the generator, transfer facility or processor/rerefiner from whom the waste oil was sent for waste oil processing/rerefining.
- (3) The identification number of the transporter who delivered the waste oil to the processor/rerefiner.
- (4) The identification number (if applicable) of the generator, transfer facility or processor/rerefiner from whom the waste oil was sent for waste oil processing/rerefining.
- (5) The quantity of waste oil accepted.
- (6) The date of acceptance.

(b) *Delivery.* A waste oil processor/rerefiner shall keep a record of each shipment of waste oil that is shipped to a waste oil burner, processor/rerefiner, transfer facility or disposal facility. These records may take the form of a log, invoice, manifest, bill of lading or other shipping documents. Records for each shipment shall include the following information:

- (1) The name and address of the transporter who delivers the waste oil to the burner, processor/rerefiner, transfer facility or disposal facility.
- (2) the name and address of the burner, processor/rerefiner, transfer facility or disposal facility who will receive the waste oil.
- (3) The identification number of the transporter who delivers the waste oil to the burner, transfer facility, processor/rerefiner or disposal facility.
- (4) The identification number of the burner, processor/rerefiner, transfer facility or disposal facility who will receive the waste oil.
- (5) The quantity of waste oil shipped.
- (6) The date of shipment.

(c) *Record retention.* The records described in subsections (a) and (b) shall be maintained for at least 3 years.

§ 298.57. Operating record and reporting.

(a) *Operating record.*

- (1) The owner or operator shall keep a written operating record at the facility.
- (2) The following information shall be recorded, as it becomes available, and maintained in the operating record until closure of the facility:
 - (i) Records and results of waste oil analysis performed as described in the analysis plan required under § 298.55 (relating to analysis plan).
 - (ii) Summary reports and details of all incidents that require implementation of the contingency plan as specified in § 298.52(b) (relating to general facility standards).

298-39

(280291) No. 321 Aug. 01

25 § 298.58**ENVIRONMENTAL PROTECTION**

Pt. I

(b) *Reporting.* A waste oil processor/rerefiner shall report to the Department in the form of a letter, on a biennial basis (by March 1 of each even numbered year), the following information concerning waste oil activities during the previous calendar year:

- (1) The identification number, name, and address of the processor/rerefiner.
- (2) The calendar year covered by the report.
- (3) The quantities of waste oil accepted for waste oil processing/rerefining and the manner in which the waste oil is processed/rerefined, including the specific processes employed.

§ 298.58. Offsite shipments of waste oil.

A waste oil processor/rerefiner who initiates shipments of waste oil offsite shall ship the waste oil using a waste oil transporter who has obtained an identification number.

§ 298.59. Management of waste.

An owner or operator of waste oil processing/rerefining facilities who generates waste from the storage, waste oil processing or rerefining of waste oil shall manage the wastes from its operations as specified in § 298.10(e) (relating to materials derived from waste oil).

Subchapter G. WASTE OIL BURNERS WHO BURN OFF-SPECIFICATION WASTE OIL FOR ENERGY RECOVERY

- Sec.
- 298.60. Applicability.
 - 298.61. Restrictions on burning.
 - 298.62. Notification.
 - 298.63. Rebuttable presumption for waste oil.
 - 298.64. Waste oil storage.
 - 298.65. Tracking.
 - 298.66. Notices.
 - 298.67. Management of waste.

Cross References

This subchapter cited in 25 Pa. Code § 298.20 (relating to applicability); 25 Pa. Code § 298.40 (relating to applicability); 25 Pa. Code § 298.50 (relating to applicability); and 25 Pa. Code § 298.70 (relating to applicability).

§ 298.60. Applicability.

(a) *General.* This subchapter applies to waste oil burners except as specified in paragraphs (1) and (2). A waste oil burner is a facility where waste oil not meeting the specification requirements in § 298.11 (relating to waste oil specifi-

298-40

(280292) No. 321 Aug. 01

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Ch. 298

MANAGEMENT OF WASTE OIL

25 § 298.61

cations) is burned for energy recovery in devices identified in § 298.61(a) (relating to restrictions on burning). A waste oil burner who complies with this subchapter is deemed to have a solid waste permit for the burning of that waste oil. The Department may require a waste oil burner subject to permit-by-rule to apply for, and obtain, an individual or general permit, or take other appropriate action, when the waste oil burner is not in compliance with the requirements for the permit-by-rule or is conducting an activity that harms or presents a threat of harm to the health, safety or welfare of the people or the environment of this Commonwealth. Facilities burning waste oil for energy recovery under one or more of the following conditions are not subject to this subchapter:

- (1) The waste oil is burned by the generator in an onsite space heater under the provisions of § 298.23 (relating to onsite burning in space heaters).
- (2) The waste oil is burned by a processor/rerefiner for purposes of processing waste oil which is considered burning incidentally to waste oil processing.
- (b) *Other applicable provisions.* A waste oil burner who conducts the following activities is also subject to other applicable provisions of this chapter as follows:
 - (1) A burner who generates waste oil shall also comply with Subchapter C (relating to waste oil generators).
 - (2) A burner who transports waste oil shall also comply with Subchapter E (relating to waste oil transporters and transfer facilities).
 - (3) Except as provided in § 298.61(b), a burner who processes or rerefines waste oil shall also comply with Subchapter F (relating to waste oil processing/rerefining facilities).
 - (4) A burner who directs shipments of off-specification waste oil from its facility to a waste oil burner or first claims that waste oil that is to be burned for energy recovery meets the waste oil fuel specifications in § 298.11 shall also comply with Subchapter H (relating to waste oil fuel marketers).
 - (5) A burner shall dispose of waste oil in accordance with Article VII or IX (relating to hazardous waste management; and residual waste management).
- (c) *Specification fuel.* This subchapter does not apply to a person burning waste oil that meets the waste oil fuel specification of § 298.11, if the burner complies with Subchapter H.

§ 298.61. Restrictions on burning.

- (a) Off-specification waste oil fuel may be burned for energy recovery in only the following devices:
 - (1) An industrial furnace identified in 40 CFR 260.10 (relating to definitions), incorporated by reference in § 260a.1 (relating to incorporation by reference, purpose, scope and applicability).
 - (2) A boiler, as defined in 40 CFR 260.10, incorporated by reference in § 260a.1 that is identified as follows:

298-41

(280293) No. 321 Aug. 01

25 § 298.62**ENVIRONMENTAL PROTECTION**

Pt. I

(i) An industrial boiler located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes.

(ii) A utility boiler used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale.

(iii) A waste oil-fired space heater if the burner meets the provisions of § 298.23 (relating to onsite burning in space heaters).

(3) A hazardous waste incinerator subject to 40 CFR Part 264, Subpart O (relating to incinerators), incorporated in § 264a.1 (relating to incorporation by reference, purpose, scope and reference), or 40 CFR Part 265, Subpart O (relating to incinerator), incorporated by reference in § 265a.1 (relating to incorporation by reference, purpose, scope and applicability).

(b) A person burning waste oil in a boiler or industrial furnace specified in paragraph (1) or (2) shall have a plan approval and operating permit issued under Chapter 127 (relating to construction, modification, reactivation and operation of sources) from the Bureau of Air Quality, or written approval from the Bureau of Air Quality if the fuel is burned in Allegheny or Philadelphia counties if Allegheny or Philadelphia county is issued first.

(c) Except as provided in subsection (d), a waste oil burner may not process waste oil unless it also complies with the requirements of Subchapter F (relating to waste oil processing/refining facilities).

(d) A waste oil burner may aggregate off-specification waste oil with virgin oil or on-specification waste oil for purposes of burning, but may not aggregate for purposes of producing on-specification waste oil.

Cross References

This section cited in 25 Pa. Code § 298.1 (relating to definitions); 25 Pa. Code § 298.60 (relating to applicability); 25 Pa. Code § 298.66 (relating to notices); 25 Pa. Code § 298.72 (relating to prohibitions); and 25 Pa. Code § 298.75 (relating to notices).

§ 298.62. Notification.

(a) *Identification numbers.* A waste oil burner which has not previously complied with the notification requirements of 40 CFR 264.11 (relating to identification number), incorporated by reference in § 264a.1 (relating to incorporation by reference, purpose, scope and reference), and 40 CFR 265.11 (relating to identification number), incorporated by reference in § 265a.1 (relating to incorporation by reference, purpose, scope and applicability), shall comply with these requirements and obtain an EPA identification number.

(b) *Mechanics of notification.* A waste oil burner who has not received an identification number may obtain one by notifying the regional administrator of their waste oil activity by submitting one of the following:

298-42

(280294) No. 321 Aug. 01

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Ch. 298

MANAGEMENT OF WASTE OIL

25 § 298.63

(1) A completed EPA form 8700-12 (to obtain EPA form 8700-12 call RCRA/Superfund hotline at (800) 424-9346 or (703) 920-9810).

(2) A letter requesting an identification number. A burner may call the RCRA/Superfund hotline to determine where to send a letter requesting an identification number. The letter should include the following information:

- (i) The burner company name.
- (ii) The owner of the burner company.
- (iii) The mailing address for the burner.
- (iv) The name and telephone number for the burner point of contact.
- (v) The type of waste oil activity.
- (vi) The location of the burner facility.

§ 298.63. Rebuttable presumption for waste oil.

(a) To ensure that waste oil managed at a waste oil burner facility is not hazardous waste under the rebuttable presumption of § 298.10(b)(1)(ii) (relating to applicability), a waste oil burner shall determine whether the total halogen content of waste oil managed at the facility is above or below 1,000 parts per million.

(b) The waste oil burner shall determine if the waste oil contains above or below 1,000 parts per million total halogens by one of the following:

- (1) Testing the waste oil.
- (2) Applying knowledge of the halogen content of the waste oil in light of the materials or processes used.
- (3) If the waste oil has been received from a processor/rerefiner subject to regulation under Subchapter F (relating to waste oil processing/rerefining facilities), using information provided by the processor/rerefiner.

(c) Waste oil containing more than 1,000 parts per million total halogens, is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed under 40 CFR Part 261, Subpart D (relating to lists of hazardous waste), incorporated by reference in § 261a.1 (relating to incorporation by reference, purpose and scope). A person may rebut this presumption by demonstrating that the waste oil does not contain hazardous waste. For example, by using an analytical method from the current edition of SW-846 to show that the waste oil does not contain significant concentrations of halogenated hazardous constituents identified in 40 CFR Part 261, Appendix VIII (relating to hazardous constituents), incorporated by reference in § 261a.1. EPA publication SW-846, current edition, is available from the Government Printing Office, Superintendent of Documents, Post Office Box 371954, Pittsburgh, Pennsylvania 15250-7954, (202) 512-1800 (Document number 955-001-00000-1). Another way of rebutting this presumption is to demonstrate that the halogenated constituents are from wastes generated by households and, therefore, under 40 CFR 261.4(b)(1) (relating to exclusions), incorporated by reference in § 261a.1 are excluded from regulation as hazardous waste.

298-43

(280295) No. 321 Aug. 01

25 § 298.64**ENVIRONMENTAL PROTECTION**

Pt. I

(1) The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins, if they are processed, through a tolling arrangement as described in § 298.24(c) (relating to offsite shipments), to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if the oils/fluids are recycled in any other manner, or disposed.

(2) The rebuttable presumption does not apply to waste oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units if the CFCs are destined for reclamation. The rebuttable presumption does apply to waste oils contaminated with CFCs that have been mixed with waste oil from sources other than refrigeration units.

(d) *Record retention.* Records of analyses conducted or information used to comply with subsections (a)—(c) shall be maintained by the burner for at least 3 years.

§ 298.64. Waste oil storage.

(a) *Storage units.* A waste oil burner may not store waste oil in units other than tanks, containers or units subject to regulation under Chapter 264a or 265a (relating to owners and operators of hazardous waste treatment, storage and disposal facilities; and interim status standards for owners and operators of hazardous waste treatment, storage and disposal facilities).

(b) *Condition of units.* Containers and aboveground storage tanks used to store oil at burner facilities shall meet the following conditions:

(1) *Be in good condition.* For example, containers and aboveground storage tanks shall not exhibit severe rusting, apparent structural defects or deterioration.

(2) *Not leaking (no visible leaks).*

(c) *Secondary containment for containers.* A container used to store waste oil at burner facilities shall be equipped with a secondary containment system.

(1) The secondary containment system shall consist of one of the following:

(i) Dikes, berms or retaining walls and a floor. The floor shall cover the entire area within the dike, berm or retaining wall.

(ii) An equivalent secondary containment system.

(2) The entire containment system, including walls and floor, shall be sufficiently impervious to the migration of waste oil to prevent waste oil released into the containment system from migrating out of the system to the soil, groundwater or surface water.

(d) *Additional requirements for containers.* The total container height of a group of containers may not exceed 9 feet. The maximum width and depth of a group of containers shall provide a configuration and aisle space which ensures access for purposes of inspection, containment and remedial action with emergency vehicles and equipment.

298-44

(280296) No. 321 Aug. 01

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Ch. 298

MANAGEMENT OF WASTE OIL

25 § 298.65

(e) *Additional requirements for storage tanks.* Storage tanks used to store waste oil shall be designed and operated in accordance with § 299.122(b) (relating to storage tanks). For existing aboveground storage tanks, an alternative design to secondary containment may be demonstrated where the tank meets the ground.

(f) *Labels.*

(1) Except as provided in paragraph (2), a container or aboveground tank used to store waste oil at burner facilities shall be labeled or marked clearly with the words “waste oil” by no later than December 2, 2001.

(2) Containers or aboveground storage tanks which are labeled or marked with the words “used oil” on June 2, 2001, shall be labeled or marked with the words “waste oil” by no later than June 2, 2003.

(3) Fill pipes used to transfer waste oil into underground storage tanks at burner facilities shall be labeled or marked clearly with the words “waste oil” by no later than December 2, 2001. Fill pipes which are labeled or marked with the words “used oil” on June 2, 2001, shall be labeled or marked with the words “waste oil” by no later than June 2, 2003.

(g) *Response to releases.* Upon detection of a release of waste oil to the environment not subject to Chapter 245, Subchapter D (relating to corrective action process for owners and operators of storage tanks and storage tank facilities and other responsible parties) which has occurred after June 2, 2001, a burner shall perform the following cleanup steps:

(1) Stop the release.

(2) Contain the released waste oil.

(3) Clean up and properly manage the released waste oil and other materials.

(4) Repair or replace any leaking waste oil storage containers or tanks prior to returning them to service, if necessary.

(h) In addition to the requirements of this subchapter, a waste oil burner shall maintain, in a readily accessible place at the facility, a copy of a preparedness, prevention and contingency (PPC) plan that is consistent with the Department’s most recent guidelines for development and implementation of PPC plans. Waste oil burners are subject to all applicable spill prevention, control and countermeasures (40 CFR Part 112 (relating to oil pollution prevention)) in addition to the requirements of this subchapter. A waste oil burner is also subject to the underground storage tank standards for waste oil stored in underground storage tanks in Chapter 245 (relating to administration of the storage tank and spill prevention program) whether or not the waste oil exhibits any characteristics of hazardous waste.

§ 298.65. Tracking.

(a) *Acceptance.* A waste oil burner shall keep a record of each waste oil shipment accepted for burning. These records may take the form of a log, invoice,

298-45

(280297) No. 321 Aug. 01

25 § 298.66**ENVIRONMENTAL PROTECTION**

Pt. I

manifest, bill of lading or other shipping documents. Records for each shipment shall include the following information:

- (1) The name and address of the transporter who delivered the waste oil to the burner.
 - (2) The name and address of the generator, transfer facility or processor/rerefiner from whom the waste oil was sent to the burner.
 - (3) The identification number of the transporter who delivered the waste oil to the burner.
 - (4) The identification number (if applicable) of the generator, transfer facility or processor/rerefiner from whom the waste oil was sent to the burner.
 - (5) The quantity of waste oil accepted.
 - (6) The date of acceptance.
- (b) *Record retention.* The records described in subsection (a) shall be maintained for at least 3 years.

§ 298.66. Notices.

(a) *Certification.* Before a burner accepts the first shipment of off-specification waste oil fuel from a generator, transporter, transfer facility or processor/rerefiner, the burner shall provide to the generator, transporter, transfer facility or processor/rerefiner a one-time written and signed notice certifying the following:

- (1) The burner has notified EPA stating the location and general description of its waste oil management activities.
 - (2) The burner will burn the waste oil only in an industrial furnace or boiler identified in § 298.61(a) (relating to restrictions on burning).
- (b) *Certification retention.* The certification described in subsection (a) shall be maintained for 3 years from the date the burner last receives shipment of off-specification waste oil from that generator, transporter, transfer facility or processor/rerefiner.

§ 298.67. Management of waste.

A burner who generates waste from the storage or burning of waste oil shall manage the waste as specified in § 298.10(e) (relating to applicability).

Subchapter H. WASTE OIL FUEL MARKETERS

- Sec.
- | | |
|---------|----------------------------------|
| 298.70. | Applicability. |
| 298.71. | Prohibitions. |
| 298.72. | On-specification waste oil fuel. |
| 298.73. | Notification. |
| 298.74. | Tracking. |
| 298.75. | Notices. |

298-46

(280298) No. 321 Aug. 01

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Ch. 298

MANAGEMENT OF WASTE OIL

25 § 298.70**Cross References**

This subchapter cited in 25 Pa. Code § 298.20 (relating to applicability); 25 Pa. Code § 298.40 (relating to applicability); 25 Pa. Code § 298.50 (relating to applicability); and 25 Pa. Code § 298.60 (relating to applicability).

§ 298.70. Applicability.

(a) A person who conducts one of the following activities is subject to the requirements of this subchapter:

(1) Directs a shipment of off-specification waste oil from its facility to a waste oil burner.

(2) First claims that waste oil that is to be burned for energy recovery meets the waste oil fuel specifications in § 298.11 (relating to waste oil specifications).

(b) The following persons are not marketers subject to this subchapter:

(1) Waste oil generators, waste oil transporters and waste oil transfer facilities who transport waste oil received only from waste oil generators, unless the waste oil generator, waste oil transporter or waste oil transfer facility directs a shipment of off-specification waste oil from its facility to a waste oil burner. However, waste oil processors/rerefiners who burn some waste oil fuel for purposes of waste oil processing are considered to be burning incidentally to waste oil processing. Thus, waste oil generators, waste oil transporters and waste oil transfer facilities who direct shipments of off-specification waste oil to waste oil processors/rerefiners who incidentally burn waste oil are not marketers subject to this subchapter.

(2) Persons who direct shipments of on-specification waste oil and who are not the first person to claim the oil meets the waste oil fuel specifications of § 298.11.

(c) Any person subject to the requirements of this subchapter shall also comply with one of the following:

- (1) Subchapter C (relating to waste oil generators).
- (2) Subchapter E (relating to waste oil transporters and transfer facilities).
- (3) Subchapter F (relating to waste oil processing/rerefining facilities).
- (4) Subchapter G (relating to waste oil burners who burn off-specification waste oil for energy recovery).

§ 298.71. Prohibitions.

A waste oil fuel marketer may initiate a shipment of off-specification waste oil only to a waste oil burner which:

- (1) Has an identification number.
- (2) Burns the waste oil in an industrial furnace or boiler identified in § 298.61(a) (relating to restrictions on burning).

298-47

(280299) No. 321 Aug. 01

25 § 298.72**ENVIRONMENTAL PROTECTION**

Pt. I

§ 298.72. On-specification waste oil fuel.

(a) *Analysis of waste oil fuel.* A waste oil generator, waste oil transporter, waste oil transfer facility, waste oil processor/rerefiner or waste oil burner may determine that waste oil that is to be burned for energy recovery meets the fuel specifications of § 298.11 (relating to waste oil specifications) by performing analyses or obtaining copies of analyses or other information documenting that the waste oil fuel meets the specifications.

(b) *Record retention.* A waste oil generator, waste oil transporter, waste oil transfer facility, waste oil processor/rerefiner or waste oil burner who first claims that waste oil that is to be burned for energy recovery meets the specifications for waste oil fuel under § 298.11 shall keep copies of analyses of the waste oil (or other information used to make the determination) for 3 years.

Cross References

This section cited in 25 Pa. Code § 298.11 (relating to waste oil specifications); 25 Pa. Code § 298.55 (relating to analysis plan); and 25 Pa. Code § 298.74 (relating to tracking).

§ 298.73. Notification.

(a) *Identification numbers.* A waste oil fuel marketer subject to this subchapter who has not previously obtained an identification number shall comply with these requirements and obtain an EPA identification number.

(b) A marketer who has not received an identification number may obtain one by notifying the EPA Regional Administrator of its waste oil activity by submitting one of the following:

(1) A completed EPA form 8700-12.

(2) A letter requesting an identification number. The letter shall include the following information:

(i) The marketer company name.

(ii) The owner of the marketer.

(iii) The mailing address for the marketer.

(iv) The name and telephone number for the marketer point of contact.

(v) The type of waste oil activity (for example, generator directing shipments of off-specification waste oil to a burner).

Cross References

This section cited in 25 Pa. Code § 298.11 (relating to waste oil specifications).

§ 298.74. Tracking.

(a) *Off-specification waste oil delivery.* A waste oil marketer who directs a shipment of off-specification waste oil to a burner must keep a record of each shipment of waste oil to a burner. These records may take the form of a log, invoice, manifest, bill of lading or other shipping documents. Records for each shipment shall include the following information:

298-48

(280300) No. 321 Aug. 01

Copyright © 2001 Commonwealth of Pennsylvania

Ch. 298

MANAGEMENT OF WASTE OIL

25 § 298.75

- (1) The name and address of the transporter who delivers the waste oil to the burner.
 - (2) The name and address of the burner who will receive the waste oil.
 - (3) The identification number of the transporter who delivers the waste oil to the burner.
 - (4) The identification number of the burner.
 - (5) The quantity of waste oil shipped.
 - (6) The date of shipment.
- (b) *On-specification waste oil delivery.* A generator, transporter, transfer facility, processor/rerefiner or burner who first claims that waste oil that is to be burned for energy recovery meets the fuel specifications under § 298.11 (relating to waste oil specifications) shall keep a record of each shipment of waste oil to the facility to which it delivers the waste oil. Records for each shipment shall include the following information:
- (1) The name and address of the facility receiving the shipment.
 - (2) The quantity of waste oil fuel delivered.
 - (3) The date of shipment or delivery.
 - (4) A cross reference to the record of waste oil analysis or other information used to make the determination that the oil meets the specification as required under § 298.72(a) (relating to on-specification waste oil fuel).
- (c) *Record retention.* The records described in subsections (a) and (b) shall be maintained for at least 3 years.

Cross References

This section cited in § 298.11 (relating to waste oil specifications).

§ 298.75. Notices.

- (a) *Certification.* Before a waste oil generator, transporter, transfer facility or processor/rerefiner directs the first shipment of off-specification waste oil fuel to a burner, it shall obtain a one-time written and signed notice from the burner certifying the following:
- (1) That the burner has notified EPA stating the location and general description of waste oil management activities.
 - (2) That the burner will burn the off-specification waste oil only in an industrial furnace or boiler identified in § 298.61(a) (relating to restrictions on burning).
- (b) *Certification retention.* The certification described in subsection (a) shall be maintained for 3 years from the date the last shipment of off-specification waste oil is shipped to the burner.

[Next page is 299-1.]

298-50

(280302) No. 321 Aug. 01

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Ch. 403

HAZARDOUS MATERIALS

67 § 403.1

CHAPTER 403. HAZARDOUS MATERIAL TRANSPORTATION

- Sec.
403.1. General information and requirements.
403.2. Definitions.
403.3. [Reserved].
403.4. Adoption of portions of 49 CFR by reference.
403.5. Interpretations of Federal Motor Carrier Safety Regulations, Federal Highway Administration, United States Department of Transportation and Hazardous Materials Regulations, Research and Special Programs Administration, United States Department of Transportation.
403.6. Effect of incorporation of the *Code of Federal Regulations*.
403.7. Supplemental rules and regulations.
403.8. [Reserved].
403.8a. Out-of-service criteria.
403.9. Penalties.
403.10. Exceptions.

Authority

The provisions of this Chapter 403 issued under section 6 of the Hazardous Substances Transportation Act (35 P. S. § 841.6); and section 1 of the act of June 23, 1978 (P. L. 509, No. 80) (35 P. S. §§ 841.3 and 841.6), unless otherwise noted.

Source

The provisions of this Chapter 403 adopted July 27, 1979, effective November 1, 1979, 9 Pa.B. 2451, unless otherwise noted.

Cross References

This chapter cited in 25 Pa. Code § 230.2 (relating to definitions); 25 Pa. Code § 230.13 (relating to transportation of licensed material); 37 Pa. Code § 13.102 (relating to pumps); and 67 Pa. Code § 179.12 (relating to emergency movements).

§ 403.1. General information and requirements.

(a) *Purpose.* The purpose of this chapter is to prescribe the methods of packing, loading and unloading of hazardous materials; the specifications, marking, inspection, condition and equipment of vehicles transporting hazardous materials; the qualifications of drivers and other matters relating to operation of the vehicles; the routing and parking of the vehicles; and other factors affecting the nature and degree of risk involved in the transportation of hazardous materials.

(b) *Application.* Application shall include the following:

(1) Every shipper and motor carrier and its officers, drivers, agents, employees and representatives involved or related to the transportation of interstate or intrastate commerce, or both, shall comply with this chapter.

(2) Officers, agents, representatives, drivers and employees of shippers and carriers involved or concerned with the management, maintenance, operation or driving of vehicles, shall be conversant and knowledgeable with this chapter.

(c) *General rule.*

403-1

(307397) No. 362 Jan. 05

67 § 403.2

DEPARTMENT OF TRANSPORTATION

Pt. I

- (1) Hazardous materials that do not comply with the requirements of this chapter may not be offered for transportation or transported.
- (2) Hazardous materials which are manufactured, packaged, stored, loaded, unloaded or transported, shall be open to inspection upon request by a Pennsylvania State Police Officer or qualified Commonwealth employe.
- (3) No person may represent, by marking or otherwise, that a container or package for the transportation of hazardous materials is safe, certified or in compliance with the requirements of the Department unless the container or package meets the requirements of this chapter.
- (d) *Exemptions.* The Department may, upon its own motion or upon application from a carrier, grant exemptions or exceptions from this chapter whenever it determines the result of granting the exemption or exception will not constitute a significant risk to the health or safety of the public.

Source

The provisions of this § 403.1 adopted July 27, 1979, effective November 1, 1979, 9 Pa.B. 2451; amended May 14, 1982, effective May 15, 1982, 12 Pa.B. 1583; readopted and amended December 2, 1988, effective upon publication and applies retroactively to November 5, 1988, 18 Pa.B. 5365. Immediately preceding text appears at serial pages (125329) to (125330).

§ 403.2. Definitions.

Definitions in this section supersede the definitions which may appear in 49 CFR adopted by reference in § 403.4 or § 403.5 (relating to adoption of portions of 49 CFR by reference; and interpretations of Federal Motor Carrier Safety Regulations, Federal Highway Administration, United States Department of Transportation and Hazardous Materials Regulations, Research and Special Programs Administration, United States Department of Transportation) for the same word or phrase. The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

Department—The Department of Transportation of the Commonwealth.

Empty container—A container that has had its contents removed by purging or cleaning, or both.

Hazardous material—A material meeting the definition of a hazardous material in 49 CFR 171.8 (relating to definitions and abbreviations).

Hazardous substance—A hazardous material meeting the definition of a hazardous substance in 49 CFR 171.8.

Hazardous waste—A hazardous material meeting the definition of a hazardous waste in 49 CFR 171.8.

Highway—A highway, street or other public way or a toll road, including the Pennsylvania Turnpike.

Motor carrier—A common carrier by motor vehicle; a contract carrier by motor vehicle; or a private carrier by motor vehicle; or a person who or which—as owner, lessee, or other possessor of one or more vehicles—directs

403-2

(307398) No. 362 Jan. 05

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Ch. 403

HAZARDOUS MATERIALS

67 § 403.3

or controls the transportation of hazardous material either for the possessor's own account or for hire. The term also includes State and local governmental agencies involved in interstate or intrastate transportation of hazardous materials as defined in this chapter.

Motor vehicle—A vehicle, machine, tractor, semitrailer or a combination thereof propelled or drawn by mechanical power and used upon the highways in the transportation of hazardous material.

Out of service—The temporary prohibition of a vehicle or operator from further service because of one or more violations regarding the safety of either.

Person—A natural person, firm, association, copartnership, corporation, company or joint stock association. The term also includes a trustee, receiver, assignee or personal representative thereof.

Qualified Commonwealth employe—A Commonwealth employe designated by the Department who is authorized to inspect vehicles, drivers, documents, equipment and loads; or cargo as provided in 75 Pa.C.S. §§ 4704 and 8302 (relating to inspection by police or Commonwealth personnel; and powers and duties of department).

Secretary—The Secretary of the Department.

Transportation—Carriage by vehicle upon a highway.

Authority

The provisions of this § 403.2 amended under 75 Pa.C.S. §§ 6103 and 8302.

Source

The provisions of this § 403.2 adopted July 27, 1979, effective November 1, 1979, 9 Pa.B. 2451; amended May 14, 1982, effective May 15, 1982, 12 Pa.B. 1583; readopted and amended December 2, 1988, effective upon publication and applies retroactively to November 5, 1988, 18 Pa.B. 5365; amended March 18, 1994, effective March 19, 1994, 24 Pa.B. 1487. Immediately preceding text appears at serial pages (180120) and (133051).

Cross References

This section cited in 67 Pa. Code § 403.6 (relating to effect of incorporation of the *Code of Federal Regulations*).

§ 403.3. [Reserved].**Source**

The provisions of this § 403.3 adopted July 27, 1979, effective November 1, 1979, 9 Pa.B. 2451; amended May 14, 1982, effective May 15, 1982, 12 Pa.B. 1583; readopted and amended December 2, 1988, effective upon publication and applies retroactively to November 5, 1988, 18 Pa.B. 5365; reserved March 18, 1994, effective March 19, 1994, 24 Pa.B. 1487. Immediately preceding text appears at serial page (133052).

Cross References

This section cited in 25 Pa. Code § 230.14 (relating to general licenses for carriers).

403-3

(204455) No. 254 Jan. 96

67 § 403.4

DEPARTMENT OF TRANSPORTATION

Pt. I

§ 403.4. Adoption of portions of 49 CFR by reference.

(a) The Department incorporates by reference the following portions of 49 CFR:

- (1) Part 171 (relating to general information, regulations, and definitions).
- (2) Part 172 (relating to hazardous materials tables and hazardous materials communications regulations).
- (3) Part 173 (relating to shippers—general requirements for shipments and packagings).
- (4) Part 177 (relating to carriage by public highway).
- (5) Part 178 (relating to shipping container specification).
- (6) Part 180 (relating to continuing qualification and maintenance of packagings).
- (7) Part 388 (relating to cooperative agreements with states).
- (8) Part 397 (relating to transportation of hazardous materials; driving and parking rules).

(b) Appropriate parts of 49 CFR may be obtained from the following:

- (1) United States Government Printing Office, Book Store, Room 118, Federal Building, 1000 Liberty Avenue, Pittsburgh, Pennsylvania 15222, (412) 644-2721.
- (2) United States Government Printing Office, Book Store, 100 North 17th Street, Robert Morris Building, Philadelphia, Pennsylvania 19103, (215) 597-0677.
- (3) United States Superintendent of Documents, United States Government Printing Office, Washington, D.C. 20402, (202) 783-3238.

Authority

The provisions of this § 403.4 amended under 75 Pa.C.S. §§ 6103 and 8302.

Source

The provisions of this § 403.4 adopted July 27, 1979, effective November 1, 1979, 9 Pa.B. 2451; amended May 14, 1982, effective May 15, 1982, 12 Pa.B. 1583; readopted and amended December 2, 1988, effective upon publication and applies retroactively to November 5, 1988, 18 Pa.B. 5365; amended March 18, 1994, effective March 19, 1994, 24 Pa.B. 1487. Immediately preceding text appears at serial pages (133053) to (133054).

Cross References

This section cited in 67 Pa. Code § 403.2 (relating to definitions).

403-4

(204456) No. 254 Jan. 96

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Ch. 403

HAZARDOUS MATERIALS

67 § 403.5

§ 403.5. Interpretations of Federal Motor Carrier Safety Regulations, Federal Highway Administration, United States Department of Transportation and Hazardous Materials Regulations, Research and Special Programs Administration, United States Department of Transportation.

The Department will be guided by interpretations of the Federal Motor Carrier Safety Regulations issued by the Federal Highway Administration, United States Department of Transportation and Hazardous Materials Regulations issued by the Research and Special Programs Administration, United States Department of Transportation. Copies of these interpretations may be obtained by contacting: Motor Carrier Safety Division, Center for Highway Safety, 215 Transportation and Safety Building, Harrisburg, Pennsylvania 17120, (717) 787-7445.

Authority

The provisions of this § 403.5 amended under 75 Pa.C.S. §§ 6103 and 8302.

Source

The provisions of this § 403.5 adopted July 27, 1979, effective November 1, 1979, 9 Pa.B. 2451; amended May 14, 1982, effective May 15, 1982, 12 Pa.B. 1583; readopted and amended December 2, 1988, effective upon publication and applies retroactively to November 5, 1988, 18 Pa.B. 5365; amended March 18, 1994, effective March 19, 1994, 24 Pa.B. 1487. Immediately preceding text appears at serial page (133054).

Cross References

This section cited in 67 Pa. Code § 403.2 (relating to definitions).

§ 403.6. Effect of incorporation of the *Code of Federal Regulations*.

(a) *Title and name changes.* To reconcile differences between this chapter and the incorporated sections of Federal regulations and to effectuate their joint enforcement, the following words and phrases shall be substituted for the language of the Federal regulations as follows:

- (1) A reference to Director means the Secretary.
- (2) A reference to the Federal Highway Administration means the Department.
- (3) A reference to Department of Transportation means the Department.
- (4) A reference to an authorized representative or special agent of the Federal Highway Administration means a Pennsylvania State Police Officer or qualified Commonwealth employee.
- (5) A reference to the Department means the Department as defined in § 403.2 (relating to definitions).

(b) *Form and documents.* References to forms in the Federal regulations incorporated by reference will be replaced by the appropriate forms prescribed by the Department.

403-5

(204457) No. 254 Jan. 96

67 § 403.7

DEPARTMENT OF TRANSPORTATION

Pt. I

Authority

The provisions of this § 403.6 amended under 75 Pa.C.S. §§ 6103 and 8302.

Source

The provisions of this § 403.6 adopted July 27, 1979, effective November 1, 1979, 9 Pa.B. 2451; amended May 14, 1982, effective May 15, 1982, 12 Pa.B. 1583; corrected May 28, 1982, effective May 15, 1982, 12 Pa.B. 1583; readopted and amended December 2, 1988, effective upon publication and applies retroactively to November 5, 1988, 18 Pa.B. 5365; amended March 18, 1994, effective March 19, 1994, 24 Pa.B. 1487. Immediately preceding text appears at serial pages (133054) to (133055).

§ 403.7. Supplemental rules and regulations.

(a) *Carrier registration.* Carrier registration shall be completed as follows:

(1) *General.* Interstate and intrastate carriers transporting hazardous materials in quantities requiring the vehicle to display markings or placarding under this chapter shall register with the Department each calendar year between January 1 and January 31. A person who initiates carriage within a given year shall register within 30 days of the initiation and each year thereafter under this paragraph.

(2) *Forms.* Registration shall be made by each carrier on forms prescribed and furnished by the Department. A separate form shall be executed for the Central Office of the carrier and for each terminal maintained by the carrier in this Commonwealth. Registration forms may be obtained upon request from the Motor Carrier Safety Division, Room 215, Transportation and Safety Building, Harrisburg, Pennsylvania 17120.

(3) *Retention of form.* The motor carrier shall maintain a copy of the forms noted in paragraph (2) in its files for 3 years.

(b) *Towing of vehicles.* A motor vehicle transporting hazardous materials in a quantity requiring the motor vehicle to display markings or placarding may not be towed on a highway except to remove the motor vehicle and cargo to the nearest place of safety, in the judgment of the carrier or its representative after consultation where possible with police, fire or other emergency personnel. The motor vehicle may not be moved until the hazardous materials are stable unless failure to do so would constitute a threat to persons or property. For requirements regarding accidents involving specific types of hazardous materials, see 49 CFR 177.853—177.861 (relating to vehicles and shipments in transit; accidents).

(c) *Extended loads.* A person may not transport hazardous material on a vehicle when the load extends beyond the sides, front or rear of the cargo-carrying compartment of the vehicle.

(d) *Unlawful transportation.* A person may not transport, by vehicle on a highway, hazardous material in a reckless manner or under conditions that will unreasonably endanger persons or property.

403-6

(204458) No. 254 Jan. 96

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Ch. 403

HAZARDOUS MATERIALS

67 § 403.7

(e) *The Vehicle Code.* Title 75 of the *Pennsylvania Consolidated Statutes* §§ 101—9701 (relating to the Vehicle Code), and provisions of this title not inconsistent with this chapter, apply to the transportation of hazardous materials.

(f) *Weight limitations.* Vehicles subject to this chapter shall comply with the weight limitations set forth in the Vehicle Code and this title.

(g) *Special permits for cargo tanks.*

(1) Cargo tanks used in the transportation of hazardous material in intrastate commerce, shall conform to the United States Department of Transportation specifications in 49 CFR Parts 173, 177, 178 and 180, as applicable, or otherwise be specifically authorized under special permit by the Department.

(2) Special permits will be issued for nonspecification cargo tanks upon application to the Department and upon completion of the testing requirements outlined on the prescribed Department forms. Special permits are effective for 2 years from the date of issue.

(3) Special permits are valid only for intrastate carriers transporting hazardous materials in this Commonwealth.

(4) Special permits are not required for cargo tanks used exclusively for the transportation of combustible liquids.

(h) *Special testing.* The Department may cause a container or cargo tank, or both, to be retested at any time.

(i) *United States Department of Transportation exemptions.* Hazardous materials, shipped under exemption and in containers specified by the United States Department of Transportation may be transported in this Commonwealth without issuance of separate Department special permits.

(j) *Streetcar crossings.* A vehicle, normally required to stop at railroad grade crossings under this chapter need not stop if the tracks are used exclusively by streetcars.

(k) *Presentation of documents.* A driver of a vehicle transporting a hazardous material on a highway shall present upon request to a member of the State Police or qualified Commonwealth employee all documents required by this chapter to be in his possession.

Authority

The provisions of this § 403.7 amended under the Vehicle Code, 75 Pa.C.S. §§ 6103 and 8302.

Source

The provisions of this § 403.7 adopted July 27, 1979, effective November 1, 1979, 9 Pa.B. 2451; amended May 14, 1982, effective May 15, 1982, 12 Pa.B. 1583; readopted and amended December 2, 1988, effective upon publication and applies retroactively to November 5, 1988, 18 Pa.B. 5365; amended March 18, 1994, effective March 19, 1994, 24 Pa.B. 1487. Immediately preceding text appears at serial pages (71287) to (71289).

403-7

(302901) No. 354 May 04

67 § 403.8

DEPARTMENT OF TRANSPORTATION

Pt. I

§ 403.8. [Reserved].**Source**

The provisions of this § 403.8 adopted July 27, 1979, effective November 1, 1979, 9 Pa.B. 2451; amended December 21, 1979, effective December 22, 1979, 9 Pa.B. 4190; amended May 14, 1982, effective May 15, 1982, 12 Pa.B. 1583; readopted and reserved December 2, 1988, effective upon publication and applies retroactively to November 5, 1988, 18 Pa.B. 5365. Immediately preceding text appears at serial pages (71289) to (71290) and (62010) to (62015).

§ 403.8a. Out-of-service criteria.

(a) *Application.* In determining whether a vehicle or driver of a vehicle, or both, will be placed out-of-service under 75 Pa.C.S. § 4704(c) (relating to inspection by police or Commonwealth personnel), State Police and qualified Commonwealth employees will use the criteria in this chapter.

(b) *Adoption of Federal standards.*

(1) *General.* The out-of-service criteria contained in Parts I, II and III of Appendix A of the Federal Highway Administration's "North American Uniform Out-of-Service Criteria" are incorporated by reference under 45 Pa.C.S. § 727(9) (relating to matter not required to be published), upon approval of the Legislative Reference Bureau, with the following exceptions to Part II:

- (i) 1.a.(6)(c) (relating to brake lining).
- (ii) 1.b.(3)(c) (relating to steering axle brake lining).
- (iii) 3.(3) (relating to bus exhaust).

(2) *Additional standards.* The following additional vehicle out-of-service criteria apply:

- (i) A vehicle's brake linings or pads shall be declared out-of-service if:
 - (A) Bonded linings are less than 2/32-inch at the thinnest point.
 - (B) Riveted linings are less than 1/32-inch above the rivet head at the thinnest point.
 - (C) Bolted lining is worn to less than 1/8-inch at the center of the shoe.

(ii) A bus shall be declared out-of-service if the exhaust system is leaking or not discharging at an outside edge of the vehicle.

(iii) A vehicle shall be declared out-of-service if a tire is marked "Not for Highway Use" or otherwise marked and having like meaning, except vehicles permitted to operate with oversize wheels and tires under 75 Pa.C.S. § 4969 (relating to permit for movement of vehicles with oversize wheels and tires) (Repealed).

(3) *Obtaining criteria.* The "North American Uniform Out-of-Service Criteria" may be obtained by contacting: Department of Transportation, Motor Carrier Safety Division, Center for Highway Safety, 215 Transportation and Safety Building, Harrisburg, Pennsylvania 17120, (717) 787-7445.

Authority

The provisions of this § 403.8a issued under the Vehicle Code, 75 Pa.C.S. §§ 6103 and 8302.

403-8

(302902) No. 354 May 04

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Ch. 403

HAZARDOUS MATERIALS

67 § 403.9**Source**

The provisions of this § 403.8a adopted March 18, 1994, effective March 19, 1994, 24 Pa.B. 1487.

§ 403.9. Penalties.

Penalties shall be as contained in 75 Pa.C.S. § 8306 (relating to penalties).

Source

The provisions of this § 403.9 adopted July 27, 1979, effective November 1, 1979, 9 Pa.B. 2451; amended May 14, 1982, effective May 15, 1982, 12 Pa.B. 1583; readopted and amended December 2, 1988, effective upon publication and applies retroactively to November 5, 1988, 18 Pa.B. 5365. Immediately preceding text appears at serial pages (62015) and (91829).

§ 403.10. Exceptions.

A driver, who was a regularly employed driver of a motor carrier as of April 1, 1994, and who continues to be a regularly employed driver of that motor carrier, is exempt from 49 CFR 391.1, 391.2, 391.11, 391.21—391.27, 391.31—391.37, 391.41—391.49, 391.51 and 391.61—391.71, if the driver only operates a truck transporting combustible liquids in intrastate retail delivery.

Authority

The provisions of this § 403.10 amended under 75 Pa.C.S. §§ 6103 and 8302.

Source

The provisions of this § 403.10 adopted July 27, 1979, effective November 1, 1979, 9 Pa.B. 2451; amended May 14, 1982, effective May 15, 1982, 12 Pa.B. 1583; readopted and amended December 2, 1988, effective upon publication and applies retroactively to November 5, 1988, 18 Pa.B. 5365; amended March 18, 1994, effective March 19, 1994, 24 Pa.B. 1487. Immediately preceding text appears at serial pages (133057) to (133058).

403-9

(204461) No. 254 Jan. 96

[Next page is 405-1.]

403-10

(204462) No. 254 Jan. 96

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